Field Experimental Project
Utilizing
Asphalt Modifiers

FIRST ANNUAL INTERIM REPORT

September, 1992

Civil & Ag. Engineering Department

Montana State University

TE275
.A765
1992
COPY 2

TE275.A765 1992

Montana Department of Transportation
Library
2701 Prospect Avenue
Helena, MT. 59620-1001

FIELD EXPERIMENTAL PROJECT
UTILIZING
ASPHALT MODIFIERS

included in

FEDERAL AID PROJECT NO. IR 94-5(25)185
PLANT MIX OVERLAY
PRAIRIE COUNTY LINE-WEST
PRAIRIE COUNTY, MONTANA

MONTANA DEPARTMENT OF TRANSPORTATION
in conjunction with the
FEDERAL HIGHWAY ADMINISTRATION

FIRST ANNUAL INTERIM REPORT

by

Joseph D. Armijo, Principal Investigator
Murari Man Pradhan, Doctoral Student
C & AE Department, MSU
Bozeman

This is a draft report subjected to review,
correction and/or modification

September, 1992

ACKNOWLEDGEMENT

We are thankful to the following gentlemen of the Department of Transportation Glendive and students of Montana State University for helping to conduct the first annual pavement survey of the field experimental test section.

Montana Department of Transportation:

Les Peterson, District Construction Engineer

Cal Frank, P.E., Assistant District Construction Engineer

Alan D. Clapp, Material Laboratory Supervisor

Montana State University:

Robert Tipton, Graduate Student

Dave Johnson

Gale Maurer

Julie Greenheck

Table of Contents

Description **Page**

Introduction 1

Test Section 2

Pavement Surface Condition 5

Rutting 6

  Profilograph 9

  First Annual Rut Measurement 10

    Rut Depth 10

    Transverse Pavement Profile 16

Discussion 23

Conclusion 24

Reference 26

List of Tables

Table	Description	Page
1	Mile Post, Stations, Length, and Sections by Use of Asphalt Binders on East and West Bound of the Field Experimental Test Section	2
2	Pavement Surface Condition - Distresses Observed on West Bound Lane	7
3	Pavement Surface Condition - Distresses Observed on East Bound Lane	8
4	First Annual Post-construction Rut Depth Obtained from Profilograph Results on West Bound Lane	12
5	First Annual Post-construction Rut Depth Obtained from Profilograph Results on East Bound Lane	15

Digitized by the Internet Archive
in 2024 with funding from
Montana State Library

https://archive.org/details/fieldexperimenta00unse

List of Figures

Figure	Description	Page
1	Location of the Field Experimental Test Section	3
2	Layout of Test Section - Location of Kraton and Polybilt Modified Asphalt and Control Sections	4
3	First Annual Post-construction Rut Depths on Left and Right Wheel Paths of West Bound Driving Lane of Polybilt and Kraton Modified and Control Sections	13
4	First Annual Post-construction Rut Depths on the Wheel Paths of West Bound Passing Lane of Polybilt and Kraton Modified and Control Sections	13
5	First Annual Post-construction Rut Depths on the Wheel Paths of East Bound Driving Lane of Polybilt and Kraton Modified and Control Sections	17
6	First Annual Post-construction Rut Depths on the Wheel Paths of East Bound Passing Lane of Polybilt and Kraton Modified and Control Sections	17
7	Typical First Annual Post-construction and Post-construction Pavement Profiles of Driving Lane of the Polybilt Modified Section	20
8	Typical First Annual Post-construction and Post-construction Pavement Profiles of Passing Lane of the Polybilt Modified Section	20
9	Typical First Annual Post-construction and Post-construction Pavement Profiles of Driving Lane on the Control Section	21

List of Figures

Figure **Description** **Page**

10 Typical First Annual Post-construction and Post-construction Pavement Profiles of Passing Lane on the Control Section 21

11 Typical First Annual Post-construction and Post-construction Pavement Profiles of Driving Lane on the Kraton Modified Section 22

12 Typical First Annual Post-construction and Post-construction Pavement Profiles of Passing Lane on the Kraton Modified Section 22

List of Photos

Photo	Description	Page
A	Polished Aggregate in the Polybilt Modified Section	28
B	Bleeding Spots in the Polybilt Modified Section	29
C	Raveling in the Polybilt Modified Section	30
D	Bleeding on the Wheel Paths of the Control Section	31
E	Wheel Path Ruts in the Control Section	32
F	Polished Aggregate in the Control Section	33
G	Bleeding Spots in the Kraton Modified Section	34
H	Polished Aggregate in the Kraton Modified Section	35
I	Raveling in the Kraton Modified Section	36
J	Raveling due to Clay Ball in the Kraton Modified Section	37

Appendix

Appendix	**Description**
A	-Procedure for Conducting Annual Pavement Surface Monitoring
B	-Tables 1WD to 13WD - Coordinate System of First Annual Post-construction Pavement Profiles of West Bound Driving Lane -Tables 1WP to 13WP - Coordinate System of First Annual Post-construction Pavement Profiles of West Bound Passing Lane
C	-Tables 1ED to 13ED - Coordinate System of First Annual Post-construction Pavement Profiles of East Bound Driving Lane -Tables 1EP to 13EP - Coordinate System of First Annual Post-construction Pavement Profile of East Bound Passing Lane
D	-Plots of the First Annual and Post-construction Pavement Profiles of West Bound Driving Lane by MSU Station Number, Highway Station Number and Modifier Used
E	-Plots of the First Annual and Post-construction Pavement Profiles of West Bound Passing Lane by MSU Station Number, Highway Station Number and Modifier Used
F	-Plots of the First Annual and Post-construction Pavement Profiles of East Bound Driving Lane by MSU Station Number, Highway Station Number and Modifier Used
G	-Plots of the First Annual and Post-construction Pavement Profiles of East Bound Passing Lane by MSU Station Number, Highway Station Number and Modifier Used

INTRODUCTION

This is a first annual interim report on the field experimental project utilizing asphalt modifiers included in the federal aid project number IR94-5(25)185, plant mix overlay, Prairie County Line-west, Prairie County, Montana. Comprehensively this report is written for the new reader; however, for the complete project information, the post-construction report is recommended.

Two polymer modifiers, Kraton D4141G from Shell Chemical Company, and Polybilt X-1 from Exxon were used in the test section. Both modifiers are rubber type polymers. The regular 85/100 penetration grade asphalt from Exxon was used in the control section and rest of the project.

The first annual monitoring of the field experimental station was completed on August 13, 1992. The monitoring of the field experimental project included the location of the fixed stations, obtaining profilograph records on both driving and passing lanes at each station, survey of pavement surface conditions, and taking differential leveling survey of the pavement profile. A Rainhart Transverse Profilograph was used to obtain the pavement surface profiles. String-line techniques were used to set up the profilograph at each of the fixed stations. Differential leveling survey was conducted at the base of the profilograph to obtain the exact profile of the pavement. The procedure used for conducting annual monitoring is shown in Appendix A.

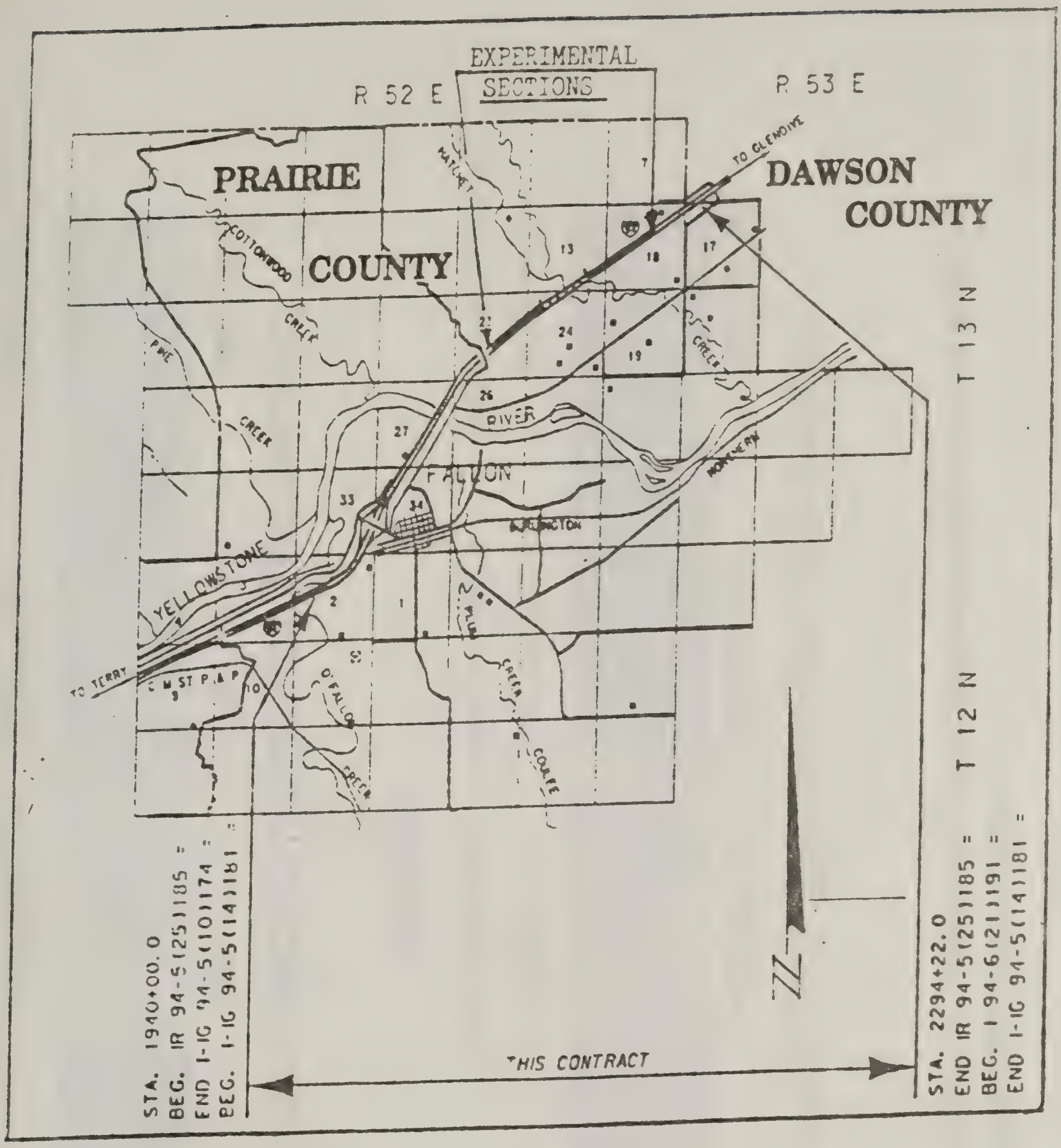
TEST SECTION

The test section consists of a length of about 3 miles on the east bound-lane and 3 miles on the west-bound lane of Interstate Highway I-94. The location of the test section is shown in Figure 1. The test section is a part of an overlay program of the Montana Department of Transportation. Table 1 shows the lengths and locations of the highway overlays by each of the modified asphalts and the control section for both east and west-bound lanes. The detail of the layout of the test section by location of asphalt binders used and mile post are shown in Figure 2.

Table 1. Mile Post, Station, Length, and Asphalt Binder on East and West Bound Lane

Mile Post	Station	Length (ft)	Binder on East Bound Lane	Binder on West Bound Lane
188.0 to 188.9	2126+92 to 2174+73	4781	Polybilt Modified Asphalt	Kraton Modified Asphalt
188.9 to 189.5	2174+73 to 2204+73	3000	85-100 Asphalt	85-100 Asphalt
189.5 to 190.6	2204+73 to 2264+25	5952	Kraton Modified Asphalt	Polybilt Modified Asphalt

The pavement thickness consisted of 0.50 feet of plant mix



Station	Mile Post	
1940+00	184.5	Beginning of the Project
2126+92	188.0	Beginning of the Test Section
2174+73	188.9	Beginning of the Control Section
2204+73	189.5	End of the Control Section
2264+25	190.6	End of the Test Section
2294+22	191.2	End of the project

Figure 1. Location of the Field Experimental Test Section

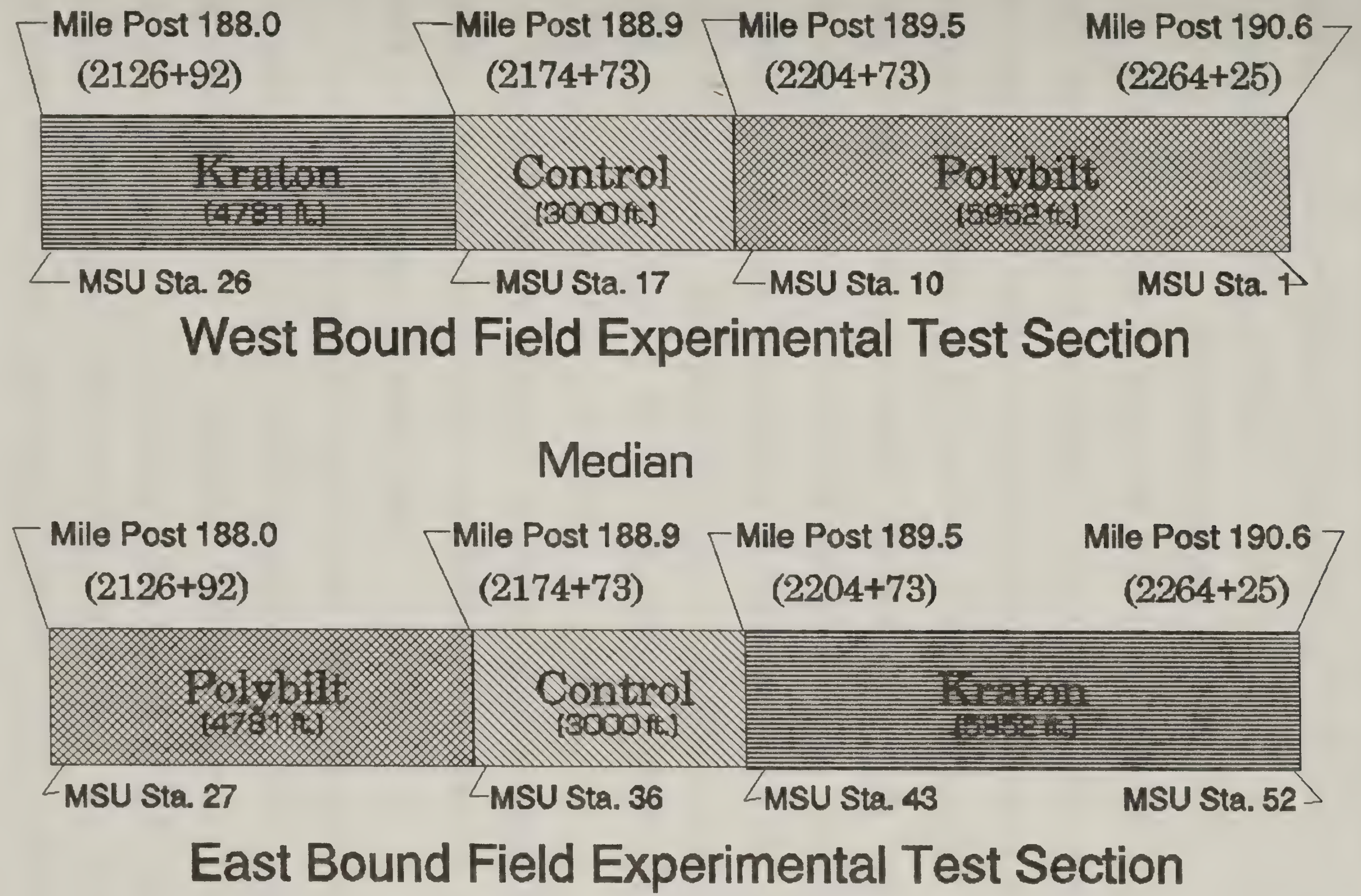


Fig. 2. Layout of Test Sections - Location of Kraton and Polybilt Modified Asphalt, and Control Section by the Mile Post, Station, and MSU Station Number.

bituminous base and 0.20 feet of plant mix bituminous surface (PMBS). A thickness of 0.20 feet of the driving lane was trenched by a milling machine and was back filled with the respective PMBS as the overlay material. A final overlay of 0.35 feet PMBS was then placed in two lifts.

PAVEMENT SURFACE CONDITION

The first annual pavement condition survey could be divided into three distinct sections by asphalt binder used on both west and east bound lanes. The Polybilt modified asphalt binder sections were covered by the MSU station 1 through 10 in west bound lane and MSU station 27 through 35 in the east bound lane. The control sections were covered by the MSU station 11 through 17 in the west bound lane and 36 through 42 in the east bound lane. The Kraton modified sections were covered by the MSU stations 18 through 26 in the west bound lane and 43 through 52 in the east bound lane, as shown in Figure 2.

Three distinct pavement surface textures were observed on the physical observation of the field experimental test section based on the asphalt binder used.

The pavement surface conditions were classified according to the SHRP distress identification manual for long term pavement performance studies (*1*). Neither transverse nor longitudinal cracks were found in the field experimental test section. However, other types distress were observed. The distresses observed in the modified sections were raveling and weathering, polished aggregate, and spot bleeding, whereas the distresses

observed in the control section were rutting and bleeding in the wheel paths. The distresses occurred in isolated spots. The severity level of the distress could not be determined; most of the raveling and weathering was just starting in isolated spots and spot bleeding was also isolated and scattered. The distresses observed in the vicinity of a station, about 100 ft. up and down the station, was recorded as the distress in the station. The type of distresses observed on the surface of both driving and passing lanes at each station are presented in tabulated form in Table 2 for the west bound lane and Table 3 for the east bound lane. Photographs were taken to record the distresses at the station. Photos A, B, and C, show the typical distresses of Polished aggregate, Bleeding spots, and raveling observed in the Polybilt modified sections. Photos D, E, and F show the bleeding, rutting, and polished aggregate observed in the control section. Photos G, H, I, and J show the bleeding, polished aggregate, normal raveling, and raveling due to clay ball in the Kraton modified section.

RUTTING

Rutting is described in the Distress Identification Manual, (*4*) as longitudinal surface depression in the wheel path. Severity level is not applicable. However, severity levels can be defined in relation to inches of rut depth. Rut depths are measured in inches to the nearest 1/10-inch at 50 ft. intervals for each wheel path. However, the rut depths in the field experimental test section were measured at the randomly picked

Table 2. Distresses Observed on the First Annual Post-construction Pavement Surface of West Bound Lane

MSU Station Number	Highway Station	Section by Binder Used	West Bound Passing Lane (WBPL)		West Bound Driving Lane (WBDL)	
			Distress Type	Severity Level	Distress Type	Severity Level
1	2260+00	Polybilt			Bleeding Spots	
2	2254+00	Polybilt			Polished Aggregate	
3	2250+00	Polybilt	Spot Bleeding		Spot Bleeding	
4	2244+00	Polybilt			Raveling and Weathering	
4	2244+00	Polybilt			Polished Aggregate	
4	2244+00	Polybilt			Spot Bleeding	
5	2238+00	Polybilt			Center Line Joint	
5	2238+00	Polybilt			Raveling and Weathering	
5	2238+00	Polybilt			Polished Aggregate	
5	2238+00	Polybilt			Spot Bleeding	
6	2232+00	Polybilt			Raveling Shoulder	
7	2226+00	Polybilt			Raveling and Weathering	
7	2226+00	Polybilt	Spot Bleeding		Spot Bleeding	
8	2220+00	Polybilt	Raveling		Spot Bleeding	
8	2220+00	Polybilt			Raveling	
9	2214+00	Polybilt			Raveling Shoulder	
10	2208+00	Polybilt				
11	2200+00	Exxon			Rutting	
11	2200+00	Exxon			Polished Aggregate	
12	2196+00	Exxon			Rutting	
13	2192+00	Exxon	Polished Aggregate		Rutting and Bleeding	
13	2192+00	Exxon			Weathering	
14	2188+00	Exxon	Raveling		Hair Line Crack	
14	2188+00	Exxon			Rutting	
15	2184+00	Exxon			Polished Aggregate	
16	2180+00	Exxon	Raveling		Polished Aggregate	
17	2176+00	Exxon			Polished Agg. & Bleeding	
18	2170+00	Kraton			Spot Bleeding	
18	2170+00	Kraton			Polished Aggregate	
19	2164+00	Kraton	Bleeding Spot		Polished Aggregate	
19	2164+00	Kraton			Spot Bleeding	
19	2164+00	Kraton			Raveling	
20	2160+00	Kraton	Ravel Spot		Raveling	
20	2160+00	Kraton			Bleeding Spots	
20	2160+00	Kraton			Polished Aggregate	
21	2154+00	Kraton	Bleeding Spot		Raveling	
21	2154+00	Kraton			Bleeding Spots	
21	2154+00	Kraton			Polished Aggregate	
22	2150+00	Kraton	Bleeding Spots		Raveling	
22	2150+00	Kraton	Polished Aggregate		Bleeding Spots	
22	2150+00	Kraton			Polished Aggregate	
23	2144+00	Kraton			Polished Aggregate	
24	2138+00	Kraton			Polished Aggregate	
25	2134+00	Kraton			Raveling	
26	2130+00	Kraton			Raveling	

Table 3. Distresses Observed on the First Annual Post-construction Pavement Surface of East Bound Lane

MSU Station Number	Highway Station	Section by Binde Used	East Bound Passing Lane (EBPL)		East Bound Driving Lane (EBDL)	
			Distress Type	Severity Level	Distress Type	Severity Level
27	2130+00	Polybilt	Spot Bleeding		Spot Bleeding	
27	2130+00	Polybilt			Polished Aggregate	
28	2134+00	Polybilt	Raveling		Spot Bleeding	
28	2134+00	Polybilt			Polished Aggregate	
28	2134+00	Polybilt			Raveling and Weathering	
29	2138+00	Polybilt			Spot Bleeding	
29	2138+00	Polybilt			Polished Aggregate	
30	2144+00	Polybilt			Spot Bleeding	
30	2144+00	Polybilt			Polished Aggregate	
31	2150+00	Polybilt	Raveling			
32	2154+00	Polybilt				
33	2160+00	Polybilt			Polished Aggregate	
33	2160+00	Polybilt			Raveling and Weathering	
33	2160+00	Polybilt			Spot Bleeding	
34	2164+00	Polybilt	Polished Aggregate			
35	2170+00	Polybilt	Raveling			
36	2176+00	Exxon			Rutting and Bleeding	
36	2176+00	Exxon			Polished Aggregate	
37	2180+00	Exxon				
38	2184+00	Exxon	Raveling		Rutting and Bleeding	
39	2188+00	Exxon			Rutting and Bleeding	
39	2188+00	Exxon			Polished Aggregate	
40	2192+00	Exxon	Raveling		Rutting and Bleeding	
40	2192+00	Exxon			Polished Aggregate	
41	2196+00	Exxon			Rutting and Bleeding	
41	2196+00	Exxon			Polished Aggregate	
42	2200+00	Exxon			Rutting and Bleeding	
43	2208+00	Kraton			Polished Aggregate	
43	2208+00	Kraton			Spot Bleeding	
44	2214+00	Kraton	Raveling		Polished Aggregate	
45	2220+00	Kraton			Good Surface Texture	
46	2226+00	Kraton			Polished Aggregate	
46	2226+00	Kraton			Raveling and Weathering	
47	2232+00	Kraton				
48	2238+00	Kraton				
49	2244+00	Kraton				
50	2250+00	Kraton			Polished Aggregate	
50	2250+00	Kraton			Raveling and Weathering	
51	2254+00	Kraton			Spot Bleeding	
52	2260+00	Kraton				

stations between distance of 200 to 600 ft.

Profilograph

The transverse profile of the pavement was taken at each identified station and the rut depths of the pavement were measured using a Rainhart Transverse Profilograph. This profilograph produced a record of the transverse profile of pavements displaying the cross section surface profile, wheel path ruts, and surface imperfections. The profilograph provides a continuous measurement of the section across the entire width of the profilograph, approximately 13 feet transverse to the direction of traffic.

The Rainhart transverse profilograph consists of a diamond shaped beam, approximately 14 feet in length which allows measurements across a lane via a rotating recording cylinder-pen apparatus that follows the rut vertical displacement. The beam spans the rutting transversely and is positioned well above the highest point of the ruts by means of supporting feet on the bottom of the beam. A rotating cylinder, actuated by a cable on the beam, carries a pen that scribes the transverse profile of the ruts as the cylinder is manually moved on the beam across the ruts. A profilograph record is produced on an 8.5 by 17-inch sheet of graph paper wrapped around the drum. The vertical pavement profile is recorded in a 1:1 scale, while the horizontal scale measures the width of pavement at a scale of 1:12 (one inch on the chart represents one foot on the pavement).

The results of the differential leveling survey were

recorded in the field book. The positions of the profilograph base on the pavement surface were marked. The levels of the position of the profilograph base, the steel pins on both sides of the pavement, reference steel bar by the right-of-way fence, and the pin across the median on the opposite bound lane were each recorded. The profilograph was not horizontal; the slope of the profilograph was parallel to the slope of the line between the position of the profilograph base on the pavement. The exact profile of the pavement surface including the transverse slope was drawn with these data.

First Annual Rut Measurement

The transverse profile records of the first annual post-construction pavement surface were obtained by running the Rainhart transverse profilograph at the same stations as before (Post-construction profiles). The exact stations were located with the help of the reference bar along the right-of-way fence and a metal detector. The center points of the pavement were marked from the distances measured earlier in the pre-construction pavement survey. The profilograph was set, as before, on the driving and passing lanes of each of the east and west-bound lanes. The traffic was diverted to the other lane while profilograph records were taken in one lane. The outputs of profilograph records were obtained for each setting at every station.

Rut Depth

The maximum rut depths on the wheel paths of the driving and

passing lanes of the west-bound lane of the first annual pavement surface were measured from the transverse profilograph record. Table 4 shows the rut depth on each of left and right wheel paths of the west-bound driving and passing lanes. Three distinct pattern of rut depths were observed from the data on Table 4 for Polybilt modified, control, and Kraton modified sections. It was also observed that the rut depth on the driving lane was greater than that in the passing lane. The average rut depths on the left and right wheel paths of the west bound passing lane were 0.06 and 0.07 inches for the Polybilt modified section, .11 and .1 inches for the control section, and .06 and .06 for the Kraton modified section. The maximum rut depths on the west bound passing lane were 0.1, .18, and 0.1 inches for the Polybilt modified, control and Kraton modified sections respectively. The average rut depths of left and right wheel paths of the west bound driving lane were 0.12 and 0.12 for Polybilt modified section, .37 and .38 inches for the control section, and .11 and .09 inches for Kraton modified section. The maximum rut depth of the west bound driving lane was .17" for Polybilt modified section, .43" for control section, and .17" for Kraton modified section as shown in statistics in Table 5. The relative differences of the average, minimum, and maximum rut depths on left and right wheel paths of the west bound lane of both Polybilt and Kraton modified sections and control section are shown in Figure 3 for driving lanes and 4 for passing lanes.

The average rut depths of the west bound driving lane on the

1992

Table 4. First Annual Post-construction Rut Depth on West Bound Field Experimental Test Section.

MSU Station Number	Highway Station	Binder Used	West Bound Passing Lane (WBPL)			West Bound Driving Lane (WBDL)		
			Left Wheel Path (LWP) (in)	Right Wheel Path (RWP) (in)	Center (in)	Left Wheel Path (LWP) (in)	Right Wheel Path (RWP) (in)	Center (in)
1	2260+00	Polybilt	0.08	0.07	0.00	0.16	0.15	0.00
2	2254+00	Polybilt	0.09	0.08	0.00	0.13	0.15	0.00
3	2250+00	Polybilt	0.07	0.08	0.00	0.11	0.12	0.00
4	2244+00	Polybilt	0.06	0.08	0.00	0.12	0.17	0.00
5	2238+00	Polybilt	0.04	0.01	0.00	0.13	0.11	0.00
6	2232+00	Polybilt	0.05	0.08	0.00	0.11	0.12	0.00
7	2226+00	Polybilt	0.05	0.08	0.00	0.12	0.10	0.00
8	2220+00	Polybilt	0.05	0.06	0.00	0.11	0.11	0.00
9	2214+00	Polybilt	0.05	0.05	0.00	0.11	0.09	0.00
10	2208+00	Polybilt	0.09	0.10	0.00	0.10	0.09	0.00
11	2200+00	Exxon	0.07	0.06	0.00	0.40	0.40	0.00
12	2196+00	Exxon	0.11	0.12	0.00	0.40	0.43	0.00
13	2192+00	Exxon	0.11	0.18	0.00	0.40	0.42	0.00
14	2188+00	Exxon	0.11	0.13	0.00	0.38	0.40	0.00
15	2184+00	Exxon	0.12	0.08	0.00	0.35	0.40	0.00
16	2180+00	Exxon	0.13	0.06	0.00	0.35	0.34	0.00
17	2176+00	Exxon	0.10	0.10	0.00	0.30	0.25	0.00
18	2170+00	Kraton	0.10	0.07	0.00	0.12	0.16	0.00
19	2164+00	Kraton	0.06	0.09	0.00	0.12	0.11	0.00
20	2160+00	Kraton	0.04	0.05	0.00	0.10	0.05	0.00
21	2154+00	Kraton	0.10	0.05	0.00	0.10	0.10	0.00
22	2150+00	Kraton	0.05	0.03	0.00	0.08	0.10	0.00
23	2144+00	Kraton	0.03	0.05	0.00	0.10	0.10	0.00
24	2138+00	Kraton	0.04	0.10	0.00	0.10	0.08	0.00
25	2134+00	Kraton	0.05	0.04	0.00	0.12	0.08	0.00
26	2130+00	Kraton	0.06	0.03	0.00	0.11	0.06	0.00

Average Rut Depth	0.07	0.07	0.00	0.18	0.18	0.00
Standard Deviation	0.03	0.04	0.00	0.12	0.13	0.00
Maximum Rut Depth	0.13	0.18	0.00	0.40	0.43	0.00
Minimum Rut Depth	0.03	0.01	0.00	0.08	0.05	0.00

Statistics of Rut Depth by Section of Modified Binder Used on West Bound Passing and Driving Lanes

Statistics of Rut Depth on LWP of WBPL			
	Average	Maximum	Minimum
Polybilt	0.06	0.09	0.04
Kraton	0.06	0.10	0.03
Exxon	0.11	0.13	0.07

Statistics of Rut Depth on RWP of WBPL			
	Average	Maximum	Minimum
Polybilt	0.07	0.10	0.00
Kraton	0.06	0.10	0.00
Exxon	0.10	0.18	0.00

Statistics of Rut Depth on LWP of WBDL			
	Average	Maximum	Minimum
Polybilt	0.12	0.16	0.10
Kraton	0.11	0.12	0.08
Exxon	0.37	0.40	0.30

Statistics of Rut Depth on RWP of WBDL			
	Average	Maximum	Minimum
Polybilt	0.12	0.17	0.09
Kraton	0.09	0.16	0.05
Exxon	0.38	0.43	0.25

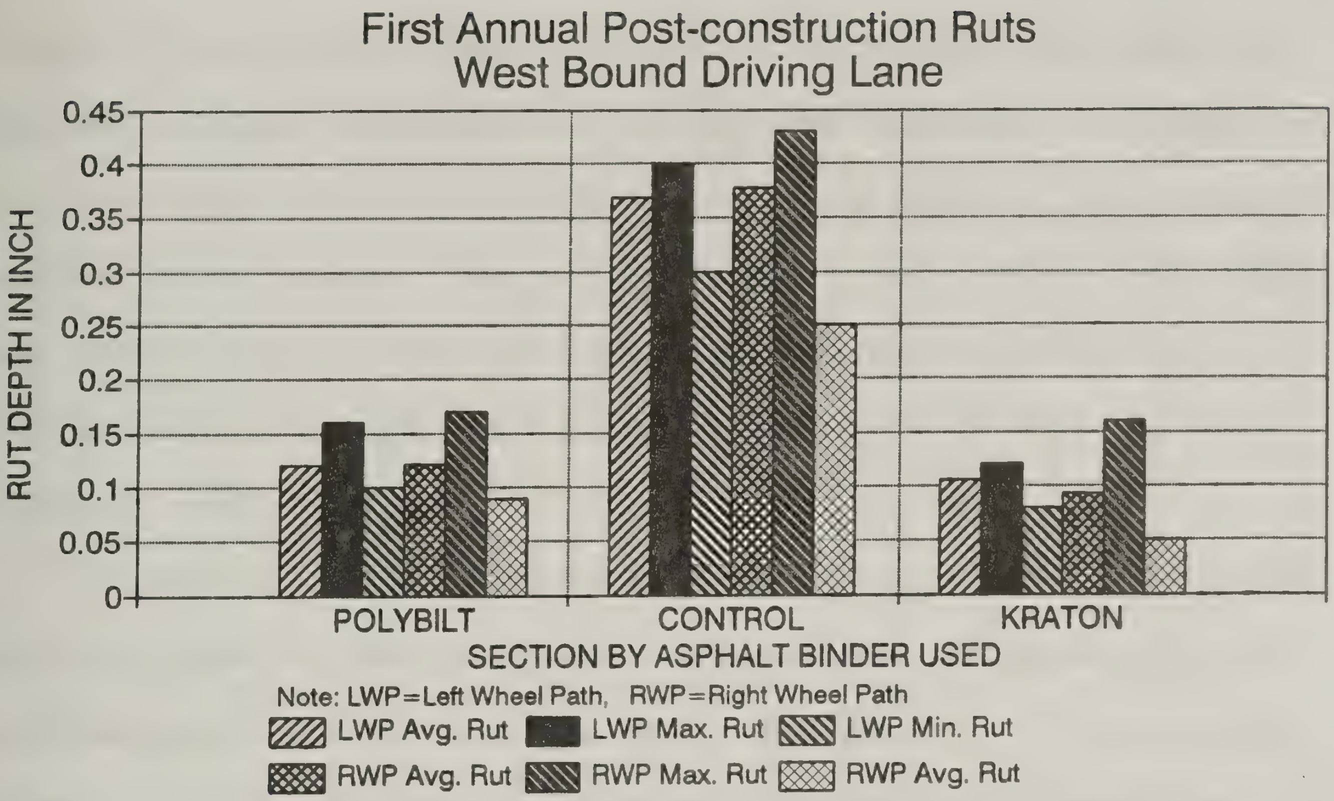


Figure 3. First Annual Post-construction Rut Depths on Left and Right Wheel Paths of West Bound Driving Lane of Polybilt Modified, Control, and Kraton Modified Sections.

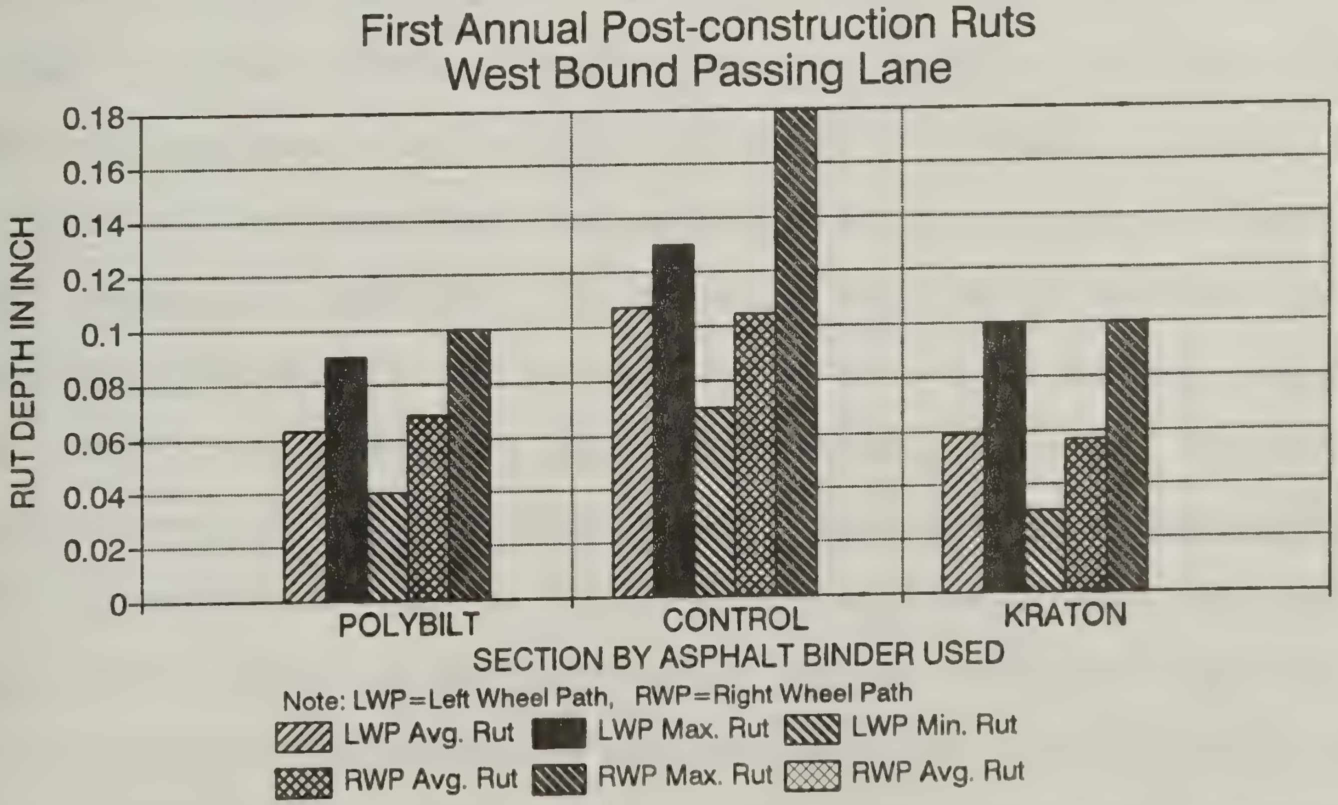


Figure 4. First Annual Post-construction Rut Depths on Left and Right Wheel Paths of West Bound Passing Lane of Polybilt Modified, Control, and Kraton Modified Sections.

control section is over three times the average rut depth of the Polybilt and Kraton modified asphalt sections. The modified asphalt binders apparently lessened the pavement rutting problem. The rut depths of the west bound driving lane of the control section have reached the value of pre-construction rut depth in just over a year. The rut depths of the passing lane on the control section were also higher than those of the polymer modified section.

Similarly, the rut depths on the east bound driving and passing lanes of the pavement surface were obtained from the profilograph records and are shown in Table 5. The average rut depths on the left and right wheel path of east bound passing lane were 0.06 and 0.1 inches for the Polybilt modified section, .06 and .09 for the control section, and .03 and .08 for the Kraton modified section. The maximum rut depth on the west bound passing lane was 0.16 for Polybilt modified section, .13 for the control section, and 0.12 inches for Kraton modified sections. The average rut depths on the pavement surface of left and right wheel path of east bound driving lanes were 0.12 and .13 inches for the Polybilt modified section, .35 and .39 inches for the control section, and .12 and .13 for the Kraton modified section. The maximum rut depths on the pavement surface of the left and right wheel paths of the east bound driving lane were 0.15 and 0.2 inches for the Polybilt modified section, .48 and .50 inches for the control section, and .15 and .15 for the Kraton modified section. The average, maximum, and minimum rut depths, by section

1992

Table 5. First Annual Post-construction Rut Depth on East Bound Field Experimental Test Section.

MSU Station Number	Highway Station	Binder Used	East Bound Passing Lane (EBPL)			East Bound Driving Lane (EBDL)		
			Left Wheel Path (LWP) (in)	Right Wheel Path (RWP) (in)	Center (in)	Left Wheel Path (LWP) (in)	Right Wheel Path (RWP) (in)	Center (in)
27	2130+00	Polybilt	0.08	0.10	0.00	0.15	0.14	0.00
28	2134+00	Polybilt	0.05	0.10	0.00	0.12	0.12	0.00
29	2138+00	Polybilt	0.07	0.11	0.00	0.10	0.09	0.00
30	2144+00	Polybilt	0.05	0.16	0.00	0.14	0.13	0.00
31	2150+00	Polybilt	0.02	0.10	0.00	0.15	0.20	0.00
32	2154+00	Polybilt	0.04	0.08	0.00	0.12	0.13	0.00
33	2160+00	Polybilt	0.05	0.05	0.00	0.10	0.10	0.00
34	2164+00	Polybilt	0.07	0.12	0.00	0.11	0.12	0.00
35	2170+00	Polybilt	0.07	0.05	0.00	0.10	0.10	0.00
36	2176+00	Exxon	0.03	0.05	0.00	0.20	0.21	0.00
37	2180+00	Exxon	0.05	0.08	0.00	0.33	0.33	0.00
38	2184+00	Exxon	0.10	0.12	0.00	0.35	0.37	0.03
39	2188+00	Exxon	0.07	0.13	0.00	0.38	0.47	0.00
40	2192+00	Exxon	0.09	0.12	0.00	0.28	0.37	0.05
41	2196+00	Exxon	0.02	0.11	0.00	0.48	0.50	0.02
42	2200+00	Exxon	0.07	0.05	0.00	0.45	0.45	0.05
43	2208+00	Kraton	0.03	0.08	0.00	0.10	0.09	0.00
44	2214+00	Kraton	0.08	0.07	0.00	0.13	0.13	0.00
45	2220+00	Kraton	0.02	0.08	0.00	0.15	0.15	0.00
46	2226+00	Kraton	0.02	0.09	0.00	0.11	0.15	0.00
47	2232+00	Kraton	0.01	0.10	0.00	0.12	0.11	0.00
48	2238+00	Kraton	0.01	0.02	0.00	0.10	0.10	0.00
49	2244+00	Kraton	0.03	0.05	0.00	0.14	0.15	0.00
50	2250+00	Kraton	0.02	0.12	0.00	0.10	0.12	0.00
51	2254+00	Kraton	0.05	0.10	0.00	0.08	0.10	0.00
52	2260+00	Kraton	0.03	0.08	0.00	0.15	0.15	0.00

Overall Average Rut Depth	0.05	0.09	0.00	0.18	0.20	0.01
Overall Standard Deviation	0.03	0.03	0.00	0.12	0.13	0.01
Overall Maximum Rut Depth	0.10	0.16	0.00	0.48	0.50	0.05
Overall Minimum Rut Depth	0.01	0.02	0.00	0.08	0.09	0.00

Statistics of Rut Depth by Section of Modified Binder Used on East Bound Passing and Driving Lanes

Statistics of Rut Depth on LWP of EBPL			
	Average	Maximum	Minimum
Polybilt	0.06	0.08	0.02
Kraton	0.03	0.08	0.01
Exxon	0.06	0.10	0.02

Statistics of Rut Depth on RWP of EBPL			
	Average	Maximum	Minimum
Polybilt	0.10	0.16	0.05
Kraton	0.08	0.12	0.02
Exxon	0.09	0.13	0.05

Statistics of Rut Depth on LWP of EBDL			
	Average	Maximum	Minimum
Polybilt	0.12	0.15	0.10
Kraton	0.12	0.15	0.08
Exxon	0.35	0.48	0.20

Statistics of Rut Depth on RWP of EBDL			
	Average	Maximum	Minimum
Polybilt	0.13	0.20	0.09
Kraton	0.13	0.15	0.09
Exxon	0.39	0.50	0.21

of the binder used, are also presented in Table 5. The relative differences of the average, minimum, and maximum rut depths on left and right wheel paths of the east bound lane of both modified sections and control section are shown in Figure 5 for driving lanes and 6 for passing lanes.

The rut depths on the east bound driving lanes of the control section are also about 3 times those on the Polybilt and Kraton modified sections. The rut depths on the pavement surface of the east bound lane of the control section are almost equal to those on the pre-construction pavement surface. The differences in rut depths on the passing lanes of both Polybilt and Kraton modified and control sections are small.

Transverse Pavement Profile

The profilograph records illustrate the actual profile of the pavement surface with reference to the straight profilograph beam. The output of the profilograph was reproduced by taking the coordinates of the profile at an interval of 3.6 inches on an arbitrarily chosen datum line. The coordinate system for the profiles of the driving and passing lanes of both west and east bound lanes were obtained.

The results of the differential leveling survey gave the elevation of the profilograph base positions and the steel pins at both ends of the pavement. The coordinates of the slope of the profilograph were derived from the elevation. From these coordinates of the profile and the profilograph elevation, the actual profiles of the first annual pavement were obtained.

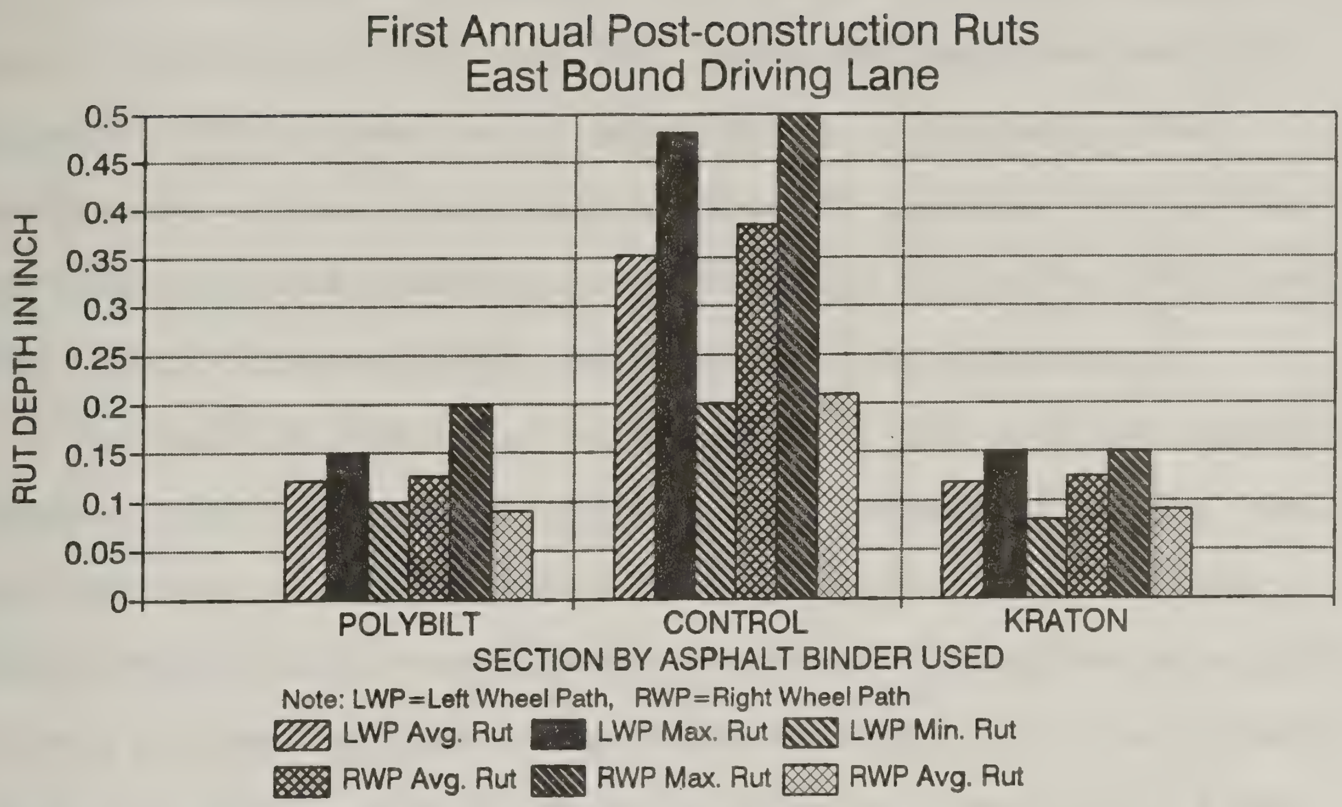


Figure 5. First Annual Post-construction Rut Depths on Left and Right Wheel Paths of East Bound Driving Lane of Polybilt Modified, Control, and Kraton Modified Sections.

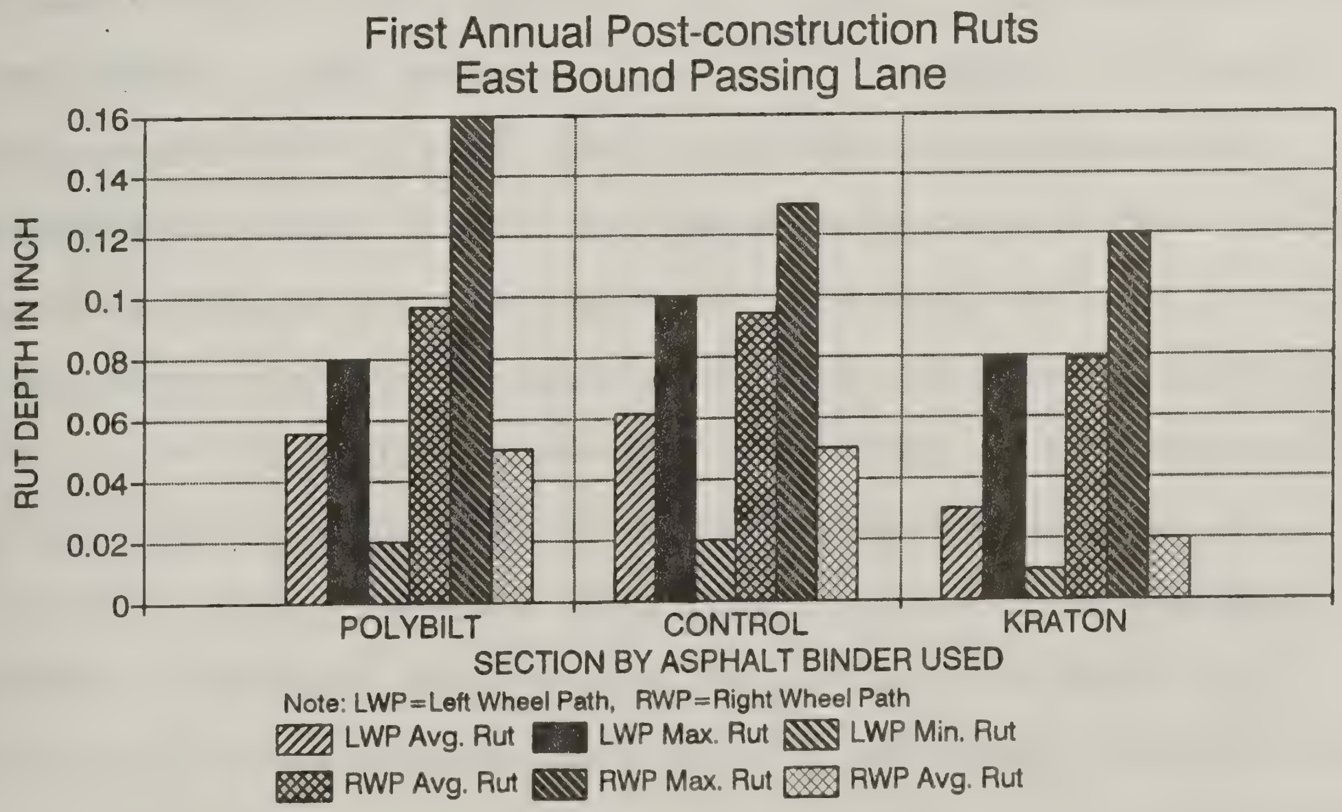


Figure 6. First Annual Post-construction Rut Depths on Left and Right Wheel Paths of East Bound Passing Lane of Polybilt Modified, Control, and Kraton Modified Sections.

The coordinates of these profiles are shown in Appendix B, Tables 1WD through 13WD for west bound driving lane and 1WP through 13WP for west bound passing lane. Similarly, the coordinates of the first annual pavement profiles of the east-bound driving and passing lanes are shown in Tables 1ED through 13ED and 1EP through 13EP, respectively, in Appendix C.

The data of the coordinate system of the post-construction pavement profile was obtained from the "Construction and Post-construction Report, November 1991". The first annual post-construction and post-construction pavement profiles were plotted for the purpose of comparison of the pavement profiles after a year of traffic and just after construction. The plot of the first annual post-construction profiles overlapped the profiles of post-construction profiles. The changes in the profiles on the wheel paths of the pavement illustrated the effect of traffic on the pavement over a year. Some plots had to be adjusted by changing the datum line of the coordinates to make them fall over the 1991 post-construction pavement profiles. The plot gave the clear picture of the changing pattern of the pavement profiles over a year of traffic. There was no rutting on the passing lanes of both Polybilt and Kraton modified asphalt and control sections, except for wheel path indentation over the pavement surface. The wheel path ruts in the driving lane were more prominent in the plots of both Polybilt and Kraton modified and control sections. The changes of the pavement surfaces due to rutting in the wheel paths of the control section are more severe

than those of the polymer modified section. Typical first annual and post-construction transverse pavement profiles of the west bound lane for the Polybilt modified section are shown in Figure 7 for driving lane and Figure 8 for passing lane. Typical first annual and post-construction transverse pavement profiles of the control section are shown in Figure 9 for driving lane and 10 for passing lane. Similar profiles of Kraton modification section are shown in Figure 11 for driving and 12 for passing lanes.

The plots of profiles by the MSU station number, highway station number, and Polybilt or Kraton modified or control section of the first annual and post-construction pavement on the west-bound lanes are shown in Appendix D for driving lanes and in Appendix E for Passing lanes. Similarly, the pavement profiles by MSU station number, highway station number, and Polybilt/Kraton modified or control section of the first annual and post-construction pavement on the east-bound lanes are shown in Appendix F for the driving lanes and in Appendix G for the passing lanes.

The pavement profiles of the control section were already distorted because of the excessive rutting. The transverse slope of the pavement was no longer in the original intended shape. This would affect the stability of the traffic and reduce the performance of the pavement. The distortion of the driving lanes was more extensive compared to that of the passing lanes.

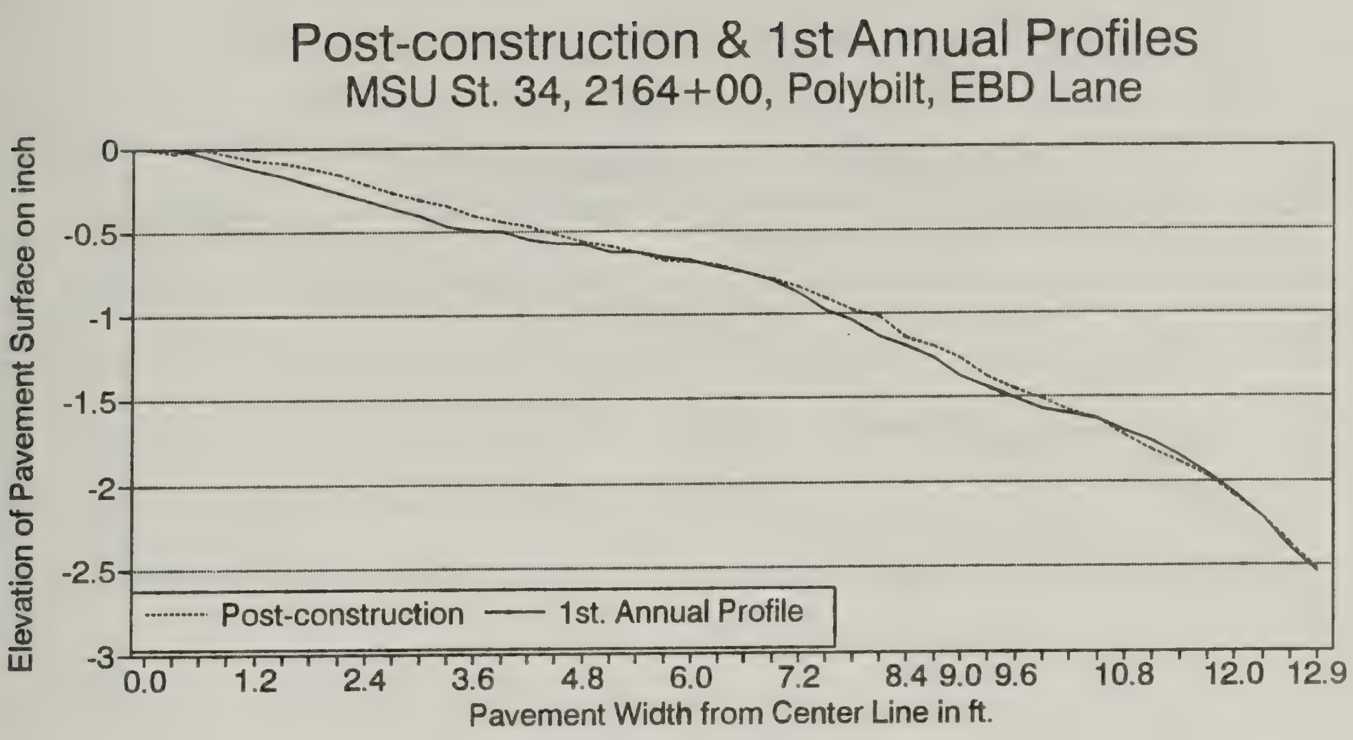


Figure 7. Typical First Annual and Post-construction Pavement Profiles of East Bound Driving Lane on the Polybilt Modified Section.

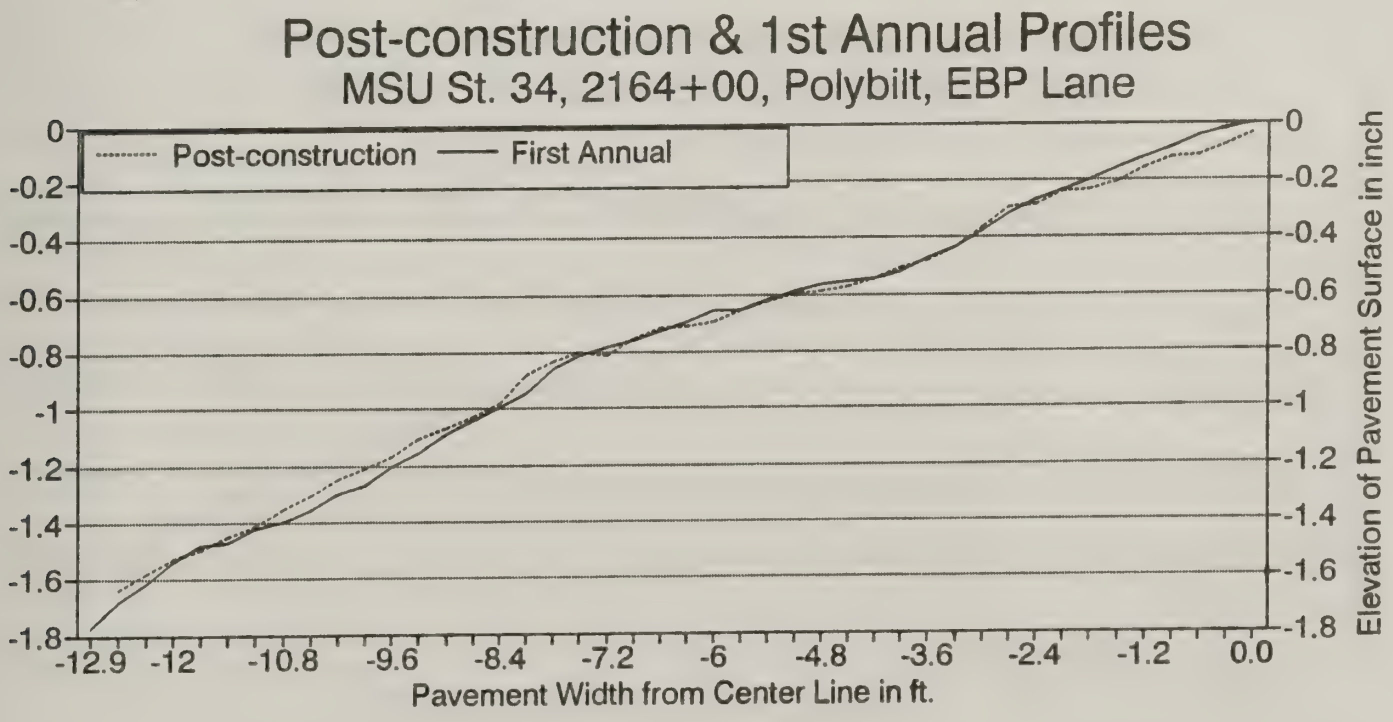


Figure 8. Typical First Annual and Post-construction Pavement Profiles of East Bound Passing Lane of the Polybilt Modified Section.

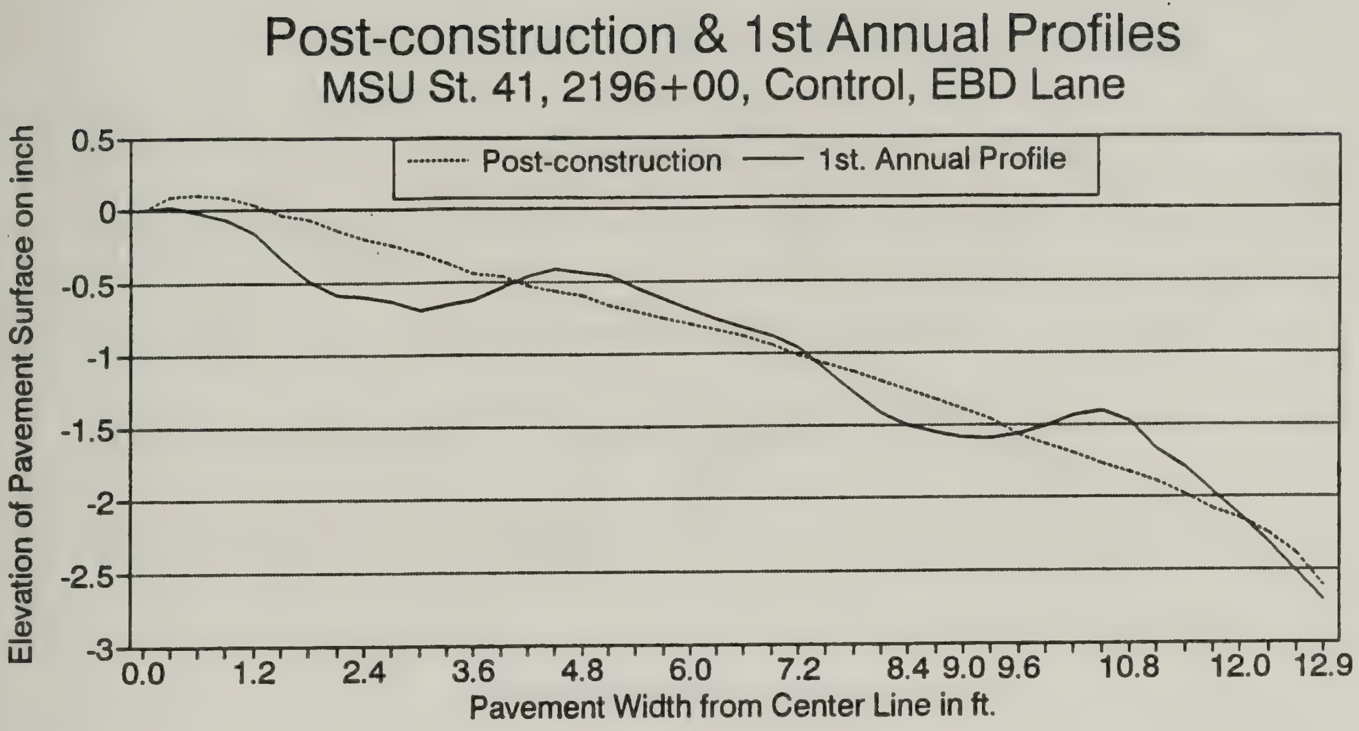


Figure 9. Typical First Annual and Post-construction Pavement Profiles of East Bound Driving Lane of the Control Section.

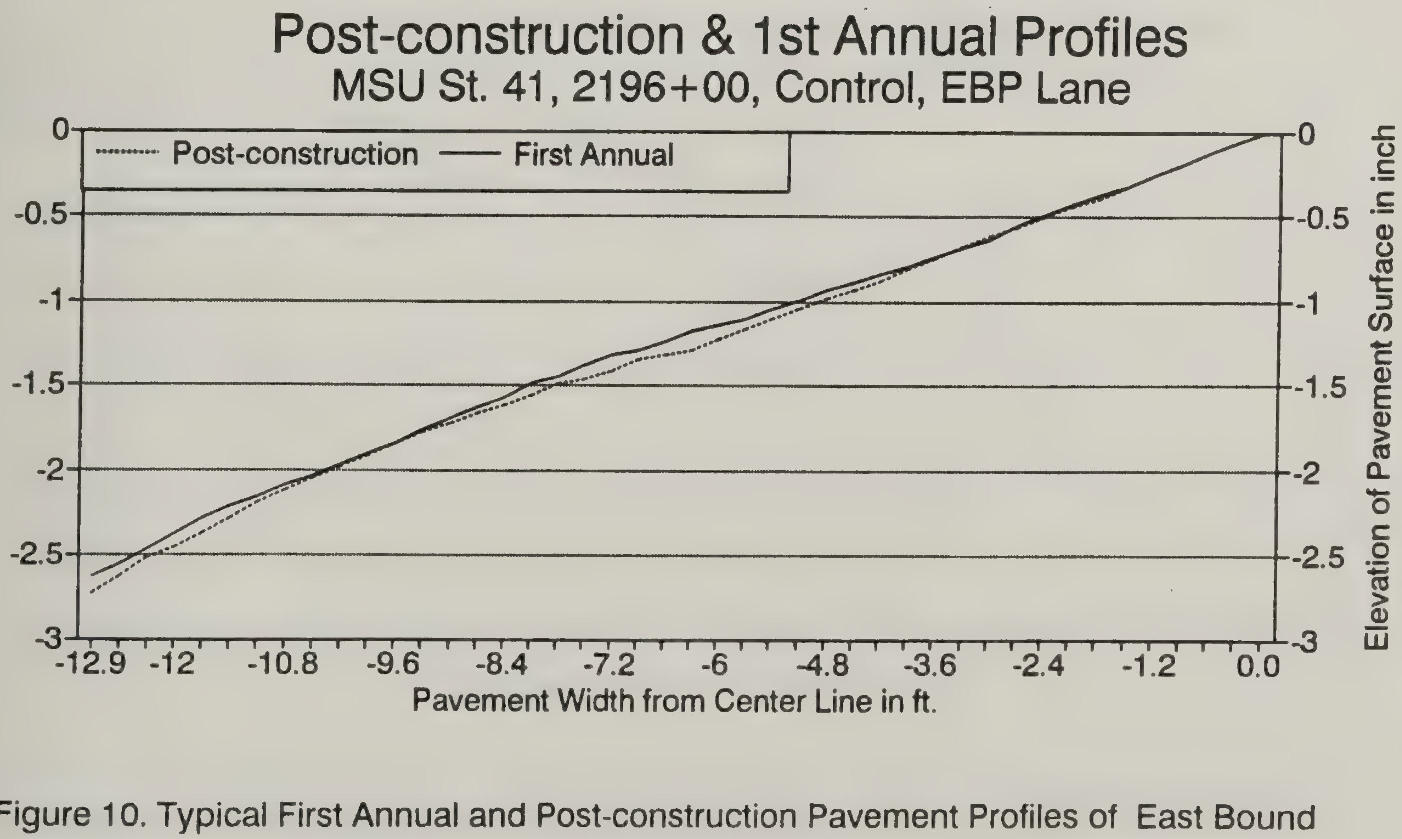


Figure 10. Typical First Annual and Post-construction Pavement Profiles of East Bound Passing Lane of the Control Section.

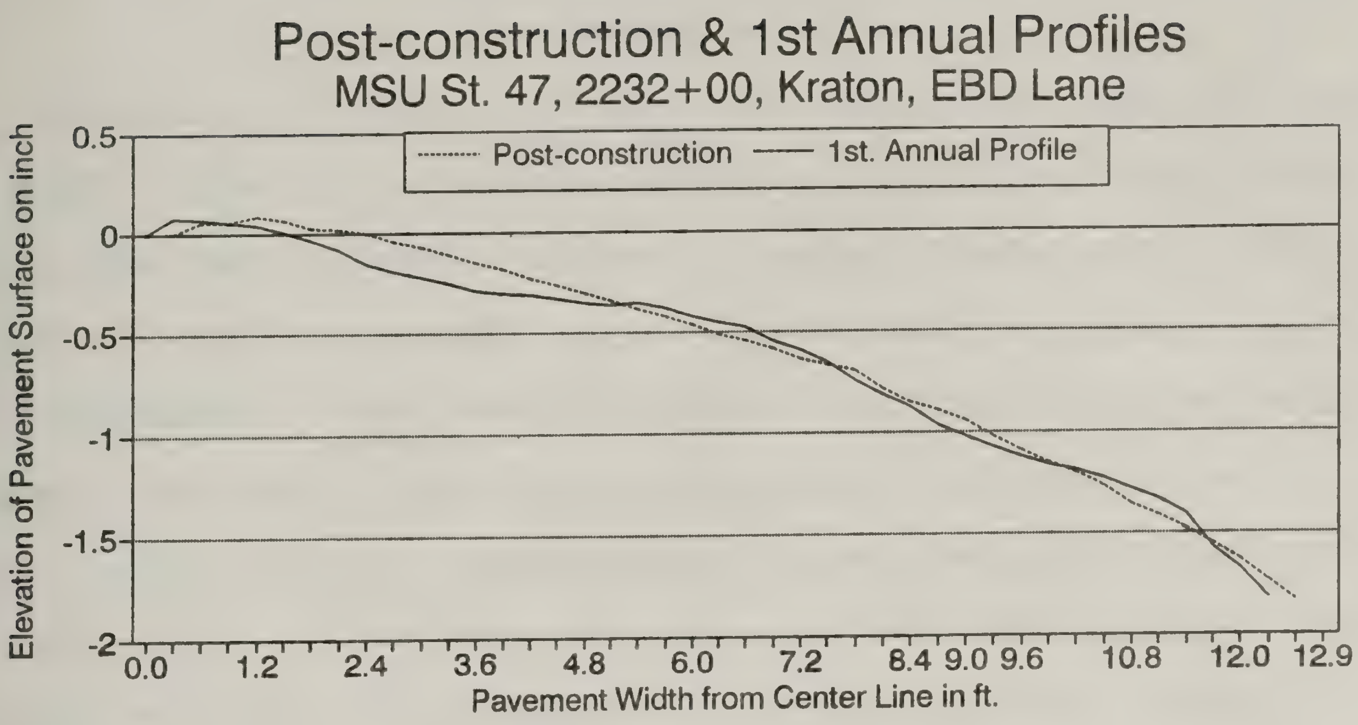


Figure 11. Typical First Annual and Post-construction Pavement Profiles of East Bound Driving Lane of the Kraton Modified Section.

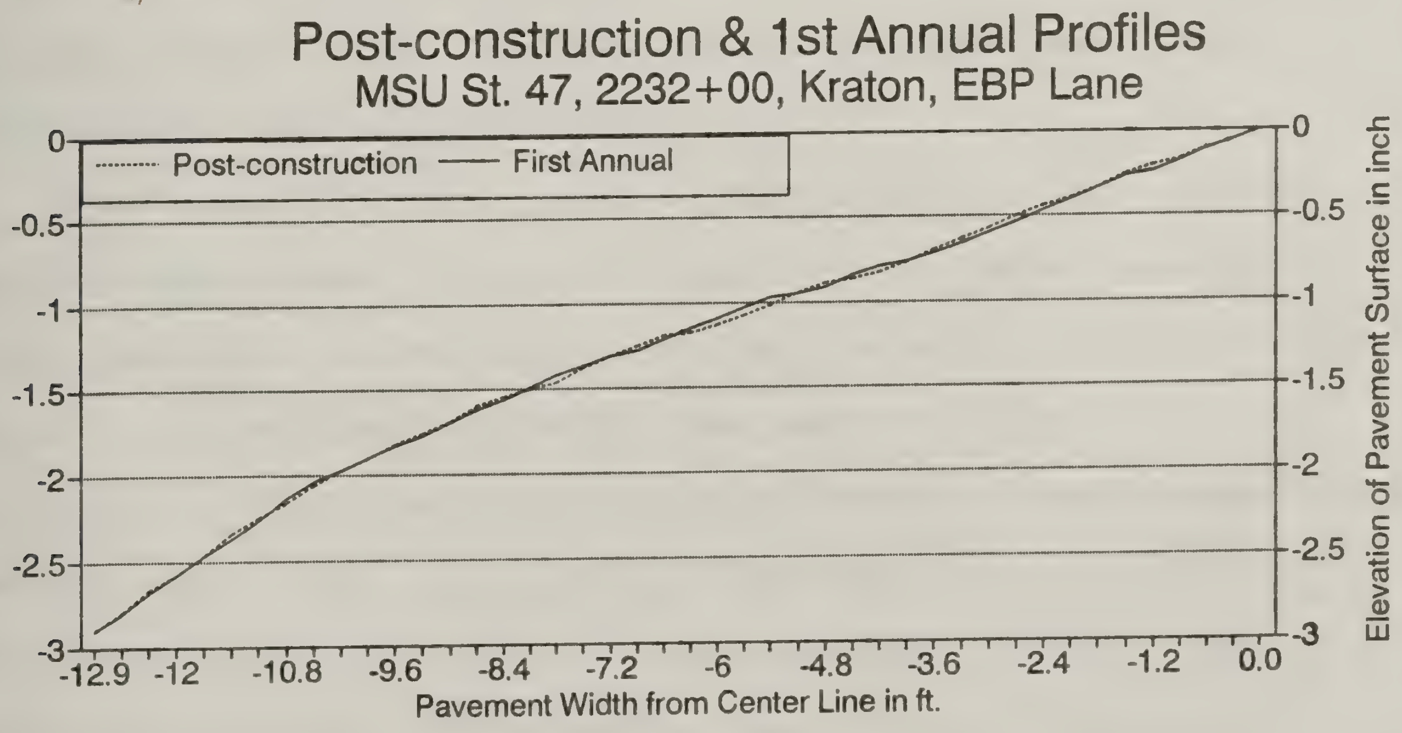


Figure 12. Typical First Annual and Post-construction Pavement Profiles of the East Bound Passing Lane of the Kraton Modified Section.

DISCUSSION

The design of the field experimental test section was based on Marshall method of mix design with a compactive effort of 50 blows. The design specifications of asphalt binder were 5.6% for Polybilt modified asphalt, 6% for Kraton modified asphalt, and 5.9% for Exxon in the control section; but, the actual average asphalt contents in the field experimental test section were 5.5%, 5.63%, and 5.76 respectively. The Marshall stability and density values of the specimens prepared with PMBS exceeded the design value in all sections. The percent air voids of the Marshall specimens prepared with PMBS were low in all modified and unmodified asphalt sections. The average percent air voids of the specimens were 2.77, 3.34, and 2.9 percent compared to the design values of 3.5, 3.5, and 3.3 for Polybilt and Kraton modified and control sections.(6)

The asphalt mixtures must be placed with a void content significantly above 3 percent (usually 5-7%) using reasonably high compactive effort to insure that the voids in the mix stay above 3 percent during traffic. The percent air voids of the cores taken after the construction of the field experimental test section were 3.48, 4.15, and 3.25 percent for the Polybilt, Kraton and control sections. These values are close to the designed values of the respective asphalt binder sections. However, these values were expected to be achieved only after a few years of traffic. This shows that the percent air voids of the experimental test section were low in both modified and

control sections. This could cause the premature failure of the pavement due to rutting for the reason stated above.

The polished aggregate observed in the first annual pavement distress study indicated likelihood of a large percentage of rounded coarse aggregate in the mix.

CONCLUSION

The ruts in both modified asphalt binder sections, Polybilt and Kraton were about 1/3 that in the control section with regular unmodified binder.

The field experimental test pavement was constructed based on a design compactive effort of 50 blows of the Marshall hammer. The air void contents of PMBS were low. The PMBS might contain a large percent of rounded coarse aggregate. The combination of low air voids and rounded aggregate is the perfect recipe for premature rutting. The control section and the overall project paved with conventional mix using regular asphalt, were rutted almost to the that of the pre-construction level. However, in spite of such construction practices, the ruts in the modified asphalt sections were significantly low. This can only be attributed to the properties of modified asphalt binders, both Polybilt and Kraton.

Isolated spots of distresses such as weathering and raveling and polished aggregate started to appear in the modified test sections in the first year of traffic. These might be the result of the rounded coarse aggregate. These distresses may spread over a large area with time, and/or the severity level of these

distresses may increase over time. This could indicate that the modified asphalt is susceptible to stripping of rounded aggregate.

The Rainhart transverse profilograph is easy to use and produces a permanent record of the transverse surface profile. The profiles of the pavement surface produced at a station are consistent over time. Analysis of the profile data does require some tedious breakdown by hand methods.

The field experimental test sections will be monitored again in August 1993. Subsequent interim progress reports and a final report will document and evaluate the performance of the Kraton and Polybilt modified asphalts.

References

1. Climatological Data Annual Summary, Montana 1990, Volume 93, No. 13.
2. Automatic Counters, 1990, Montana.
3. Traffic By Section Montana 1989
4. Distress Identification Manual for the Long-Term Pavement Performance Studies, SHRP-LTPP/FR-90-001, Strategic Highway Research Program, Washington D. C.
5. Wyoming State Highway Department Point of Rocks, Report No.1 V10., 1 May, 1988, DSK RDP 98(88-1637), Wyoming
6. Armijo, J, Pradhan, M, Field Experimental Test Section, Construction and Post-construction Report, November, 1991.
7. Brown, E. R., Cross S. A. A National Study of Rutting in Hot Mix Asphalt (HMA) Pavement, NCAT, 1992
8. Kandhal, P. S., Cross, S. A., Brown, E. R., Evaluation of Bituminous Pavements for High Pressure Truck Tires, NCAT, 1990.

Dawson
County

STOP

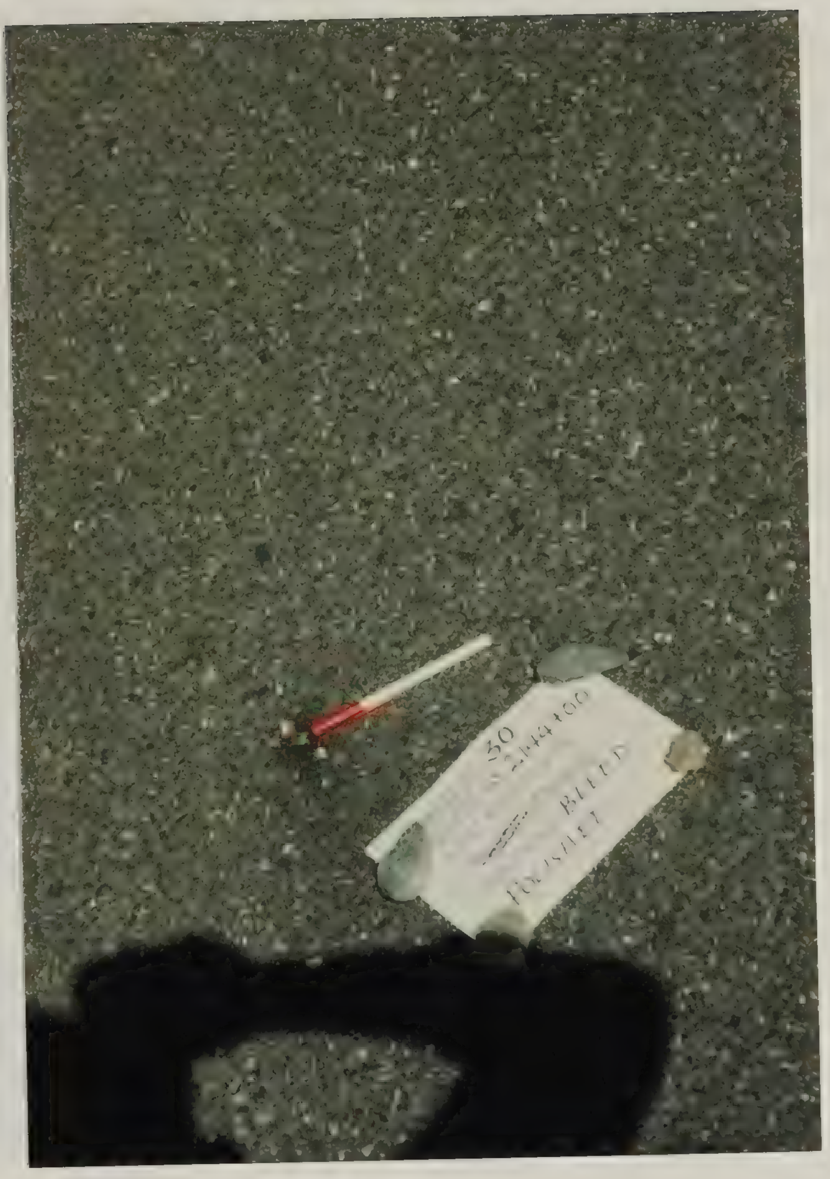


Photo A. Polished Aggregate in the Polybilt Modified Section

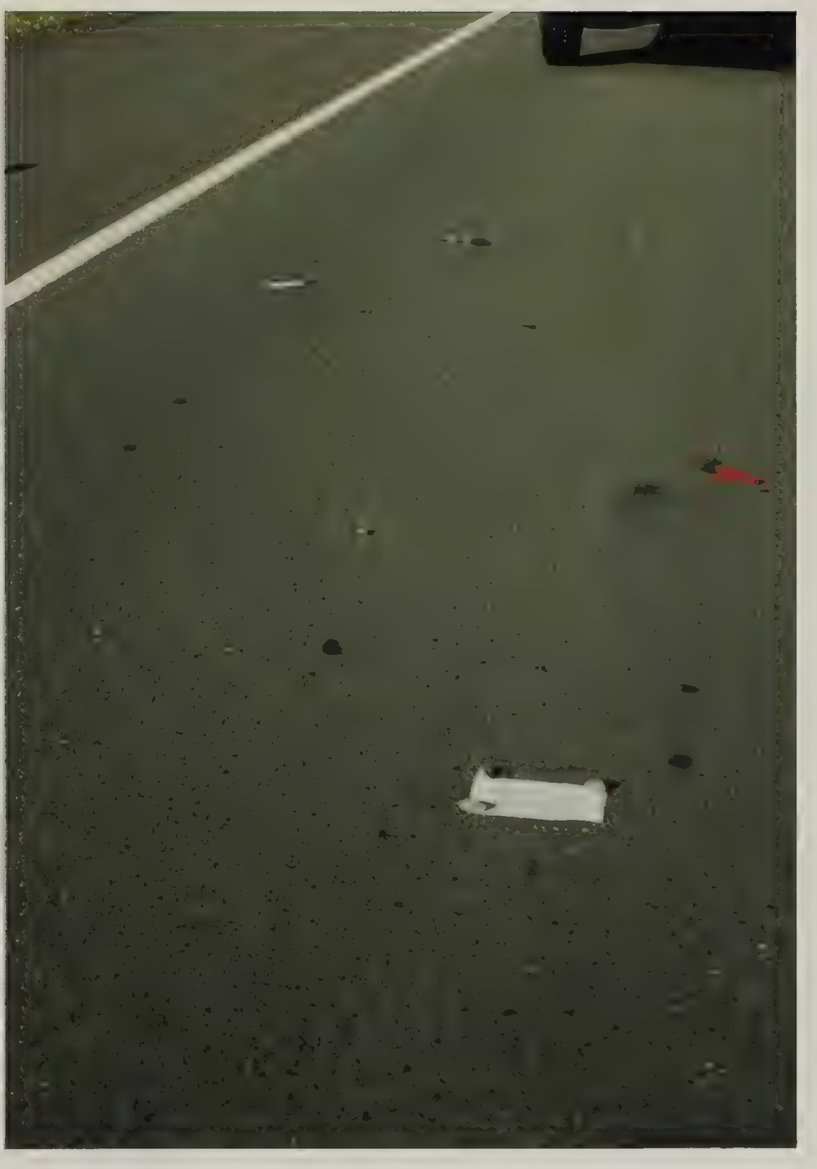


Photo B. Bleeding Spots in the Polybilt Modified Section

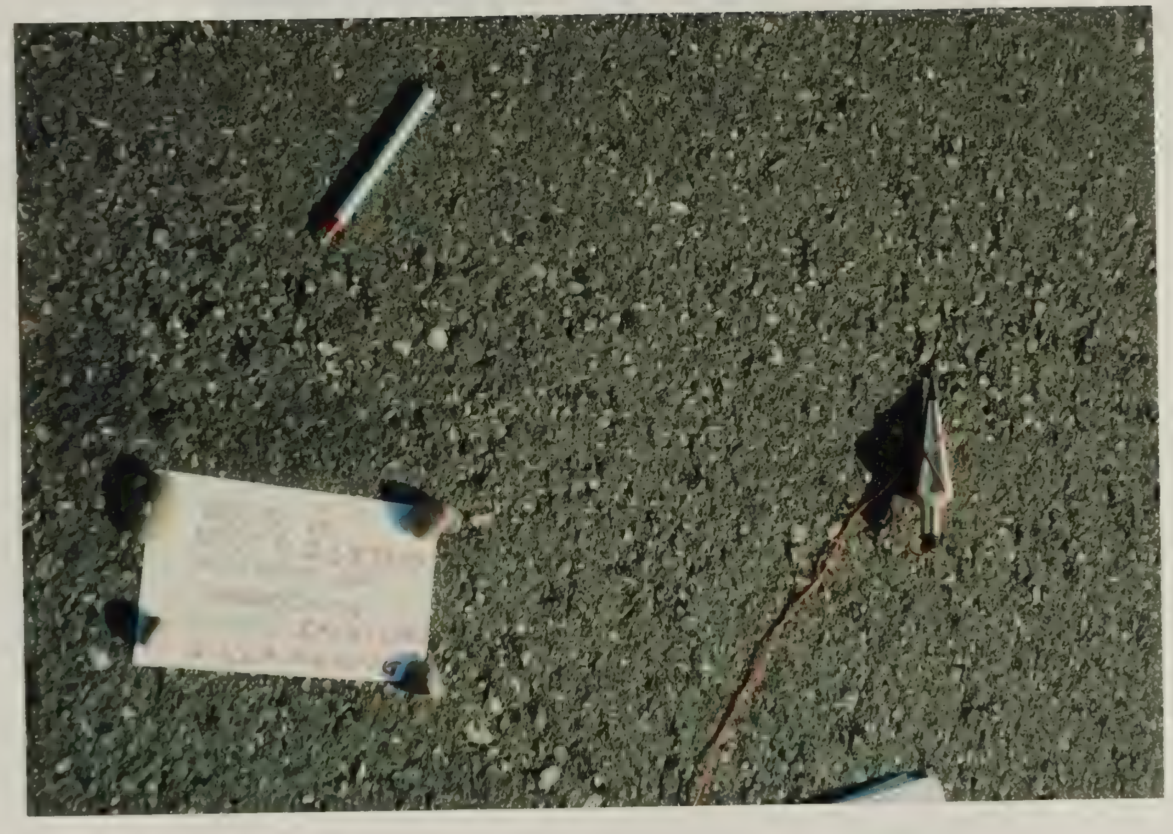


Photo C. Raveling in the Polybilt Modified Section

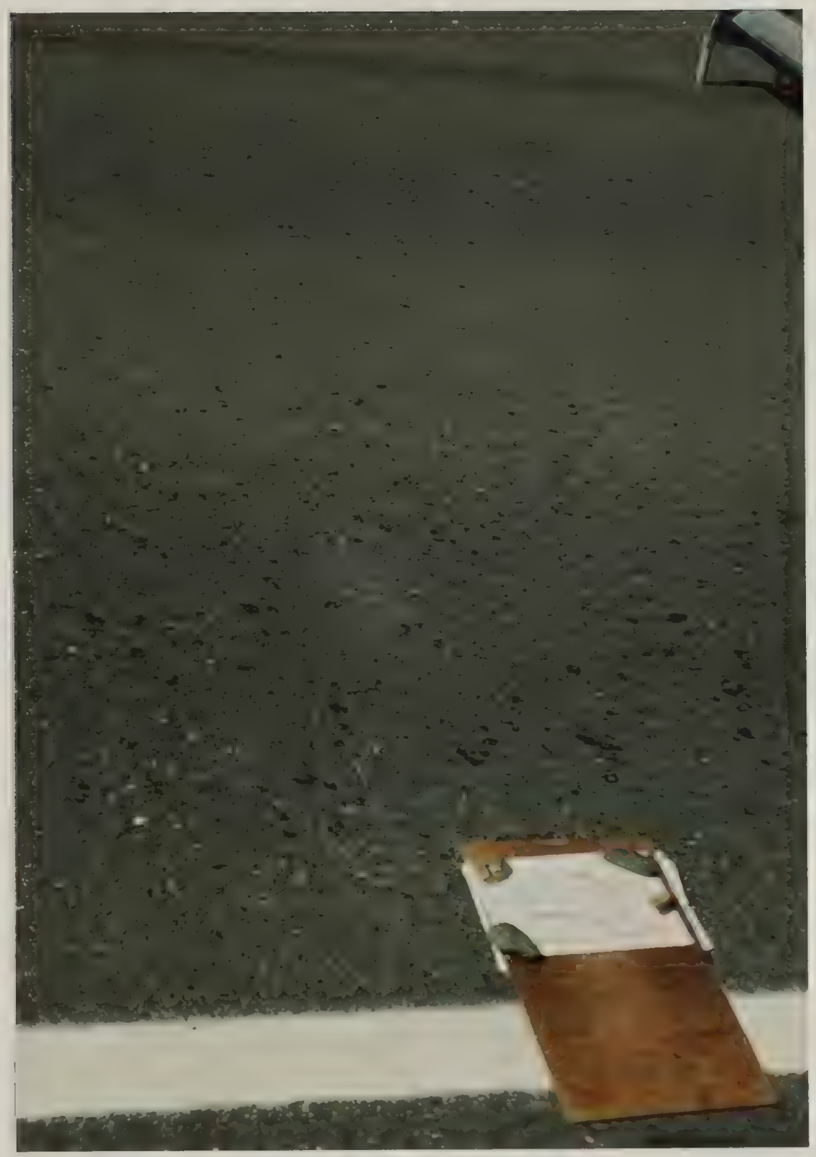


Photo D. Bleeding on the Wheel Paths of the Control Section

Photo E. Wheel Path Ruts in the Control Section

Photo F. Polished Aggregate in the Control Section

Photo G. Bleeding Spots in the Kraton Modified Section

Photo H. Polished Aggregate in the Kraton Modified Section

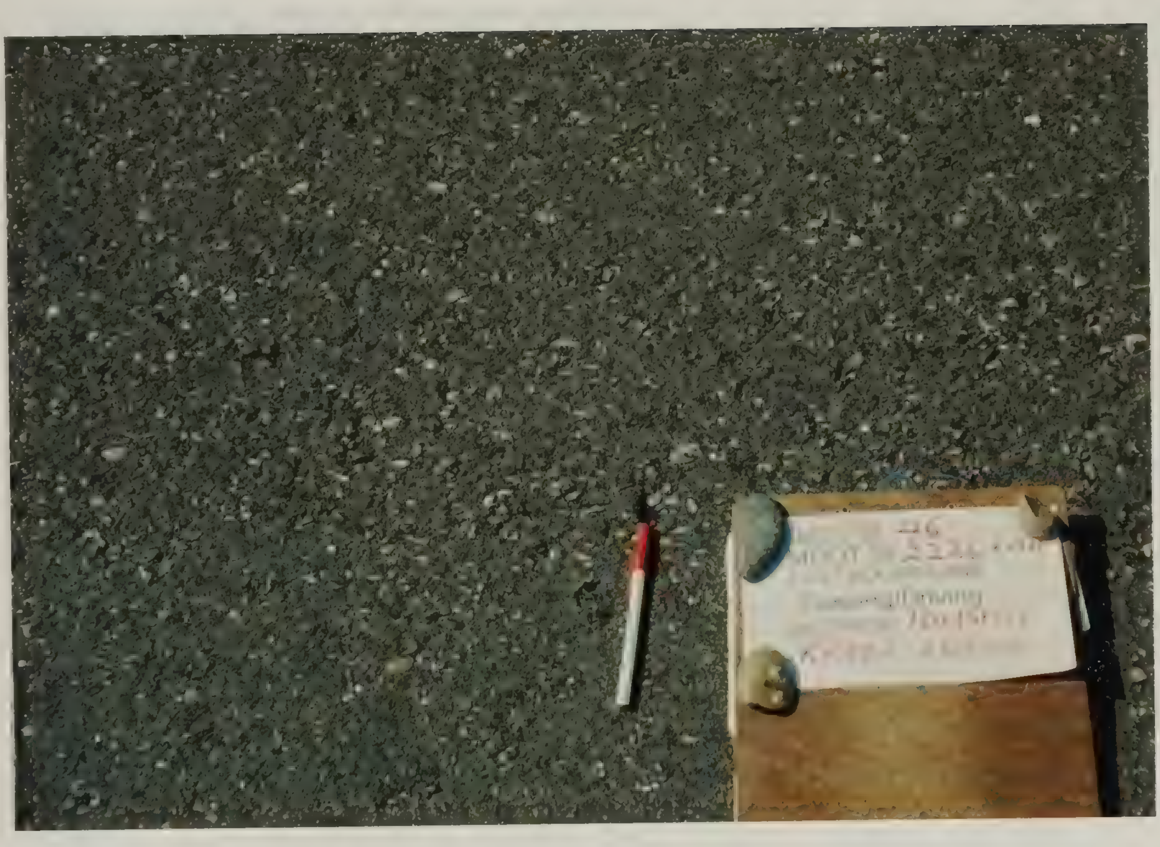


Photo I. Raveling in the Kraton Modified Section

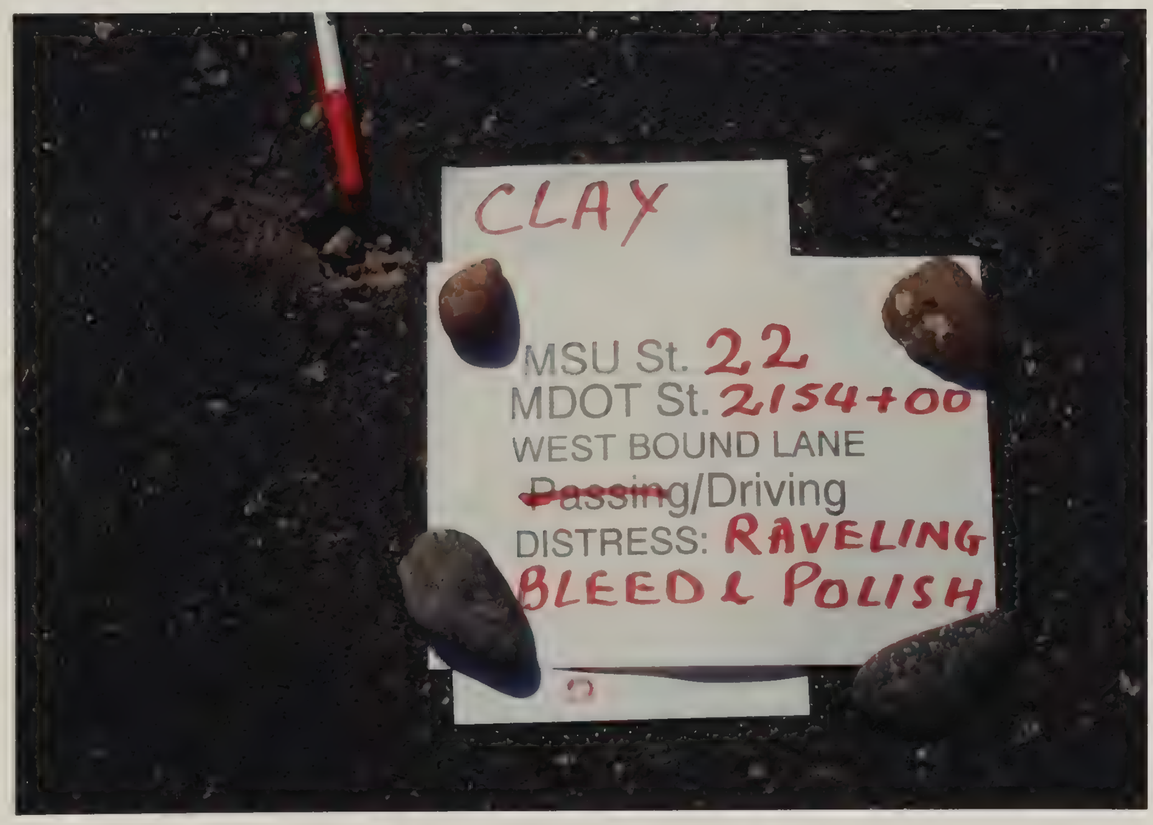


Photo J. Raveling due to Clay Ball in the Kraton Modified Section

Appendix A

-Procedure for Conducting Annual Pavement Surface Monitoring

Annual Pavement Surface Monitoring

This report provides a procedure for monitoring the experimental test section, project IR94-5(25)185. Montana State University (MSU) investigated six different types of commercial asphalt modifiers to combat the rutting problems of highways in Montana. Montana Department of Transportation (MDT) decided to implement an experimental test section using two polymer modifiers, Kraton and Polybilt, based on the result of the investigation. MDT awarded a contract to MSU to monitor the performance of the experimental test project from the time of its conception to five years in service. According to the contract, MSU will carry out a detailed investigation of the pavement surface annually, (in August) and semi-annually every winter, (in February).

The experimental modified asphalt test section is located on the I-94 Interstate Highway between mile post 188 to 190.6 east of Miles City near Fallon. The test section includes both east and west bound lanes of the I-94 Interstate Highway. This report contains the following sections to describe the equipment and methods necessary to perform the annual survey:

List of materials and tools
Location of station pins
Traffic control
Profilograph setting and recording
Pavement distress study
Leveling survey
Expenses
Presentation of Data

List of Materials and Tools

Following materials and tools are required to conduct the profilograph study

To Locate Stations and Pins

1. Metal detector (preferably 2)
2. Fluorescent orange marking spray paint (8 cans)
3. Fluorescent orange or pink ribbons
4. Location charts of stations on both lanes Table 1 and 2.
5. Shovel and pick
6. Hammer

Safety

1. Fluorescent orange vests
2. 2 Survey party signs with 35 mph posting
3. Protective clothing (according to the season)

Traffic Control

1. 2 Survey Party signs with 35 mph posting
2. 2 'Flagger' signs, if available
3. 2 Stop/Slow flagger paddle, if available
4. 60 to 65 channelizing devices
5. Pickup truck with high visibility flasher

Profilograph

1. Profilograph (stored at MDT, Glendive)
2. 8 1/2x14 graph papers for each station (10 sq/in)
3. 3 Fine point felt pens
4. Trailer with clamping device (Provided by MDT)
5. Hammer and nails (3 inch long)
6. Twine for string line

7. Fluorescent orange marking spray paint (1 can)
8. Envelopes for data sheets
9. Measuring tapes 100 ft. long
10. 2 straight rods (36 inch long for sighting)
11. Thermometer

Pavement Distress Study

1. Camera with close up capability
2. Film 4 to 5 roles @ 36 frames each
3. Identification cards (Pre-made for each station)
4. Distress identification manual-SHRP-LTPP/FR 90-001
5. Marker pen
6. Clip board

Leveling Survey

1. Level with tripod stand
2. Leveling rod (Philadelphia type)
3. 2 'Survey party' signs with 35 mph posting
4. 2 Stop/slow flagger paddles
5. Field book
6. Pencils
7. Thermometer

Location of Stations and Pins

The identification of the stations is marked by both MSU station number and the highway station between mile post 188 and 190.6. The MSU stations are randomly picked highway stations. The MSU stations 1 to 26 are located on west bound lane and 27 to 52 are on the east bound lane of I-94 Interstate Highway. The locations of the MSU stations and highway stations are shown in

Tables A and B. The location of steel pins are shown by distance measured from the center line of the pavement.

The MSU stations are marked on the steel pin by the right-of-way fence. The stations can be located by the marking on the steel pins by the right-of-way fence, the ribbon on the fence, and the highway stations marked on the center of meridian. Once a station is located, approximate location of the next station can be found by counting steps to measure the length to the next station. The exact location of the steel pins on both side of the pavement are found by use of the metal detector. The steel pins are approximately 4 to 5 feet from the edge of the pavement. The location of MSU stations on the east bound lane are on the same highway stations as those on the west bound lane. Once a station in the west bound lane is located, the corresponding station on the east bound lane can also be located.

Traffic Control

The traffic control plan as recommended by MDT, (Glendive) is shown in Figure A. The "Survey Party" signs with 35 mph posting are placed about 1000 to 1500 ft. from the work station. The "Flagger" sign should be placed between the "Survey Party" sign and work station if used, depending on the availability of the signs. The channelizing devices are placed on the lane throughout the experimental test section to divert the traffic from the lane. The stop/slow flagger paddle is used to slow the traffic as it approaches the profilograph location and is highly recommended to ensure safety. After completing the work on one lane, the next lane is blocked by shifting the channelizing devices at the beginning of

Glendive Experimental Test Section, 1991

Table A. Lay Out of MSU Stations for Transverse Profile Measurement Using Reinhart Profilograph, Location of Pins and Distance between Them on the West Bound Interstate Highway I-94

```
<--A-->  <-------- B  --------->  <----------C-- ---------->  <-----D----->
X______  X________________________X___________________________X____________X
Rebar    Left         Driving     Pavement        Passing     Right        Median
         Pin          Lane        Center Line     Lane        Pin          Center Line
```

MSU Station Number	Highway Station	Distance Between:					Remark
		Rebar & Left Pin (ft) (A)	Left Pin and Center Line (ft.) (B)	Ct. Line & Right Pin (ft.) (C)	Rt. Pin & Med. Ct. Line (ft.) (D)	Lt. Pin & Right Pin (ft.) (B+C)	
1	2260+00	51.54	28.48	21.68	30.04	50.16	51.72 (C+D)
2	2254+00	52.74	27.89	21.02	34.23	48.91	
3	2250+00	62.63	27.72	21.17	29.32	48.89	59.28 (Lt. Pin to Corner Post)
4	2244+00	70.81	27.92	21.29	29.06	49.21	
5	2238+00	81.18	27.71	20.79	29.73	48.50	
6	2232+00	80.74	27.76	21.53	29.55	49.29	
7	2226+00	80.62	27.11	21.49	28.87	48.60	
8	2220+00	80.82	27.45	21.20	30.55	48.65	
9	2214+00	79.92	27.91	21.42	27.34	49.33	
10	2208+00	68.37	30.45	21.95	26.08	52.40	Nail in paved median drainage
11	2200+00	66.52	31.29	21.77	25.75	53.06	
12	2196+00	66.70	31.05	22.21	27.45	53.26	
13	2192+00	NA	24.97	21.73	28.97	46.70	Guard rail face*
14	2188+00	NA	25.18	21.65	19.35	46.83	Nail in median, guard rail face*
15	2184+00	NA	25.31	21.65	23.25	46.96	Nail in median, guard rail face*
16	2180+00	71.28	28.68	21.54	24.88	50.22	Nail in paved median drainage
17	2176+00	68.50	31.46	21.30	25.81	52.76	Nail in paved median drainage
18	2170+00	72.95	27.79	21.12	28.42	48.91	
19	2164+00	93.95	30.53	22.05	32.12	52.58	
20	2160+00	85.58	27.83	22.22	29.67	50.05	40.00 (1st & 2nd Rebar Distance)**
21	2154+00	71.00	28.13	24.16	29.55	52.29	50.94 (1st & 2nd Rebar Distance)**
22	2150+00	65.65	27.17	23.67	26.05	50.84	54.87 (1st & 2nd Rebar Distance)**
23	2144+00	52.55	27.29	21.19	29.55	48.48	Nail in paved median drainage
24	2138+00	62.16	27.16	23.01	26.95	50.17	61.88 (1st & 2nd Rebar Distance)**
25	2134+00	82.92	27.62	21.31	28.30	48.93	44.33 (1st & 2nd Rebar Distance)**
26	2130+00	87.40	27.17	21.88	28.00	49.05	39.85 (1st & 2nd Rebar Distance)**

* Guard rail posts will be raised, therefore distances may be altered slightly.

** 1st rebar set at top of cut, 2nd rebar at right of way fence.

Glendive Experimental Test Section, 1991

Table B. Lay Out of MSU Stations for Transverse Profile Measurement Using Reinhart Profilograph, Location of Pins and Distance between Them on the East Bound Interstate Highway I-94

```
<--A--> <------------ B----------> <----------- C -------> <----------D--------->
X_____  X_______________________   X______________________ X____________________X
Median  Left        Passing        Pavement  Driving       Right                Rebar
Ct. Line Pin        Lane           Ct. Line  Lane          Pin                  Near
                                                                                Fence
```

MSU Station Number	Highway Station	Distance Between: Median Center & Left Pin (ft (A)	Left Pin & Center Line (ft.) (B)	Center Line & Right Pin (C)	Right Pin & Rebar (ft.) (D)	Left Pin & Right Pin (ft.) (B+C)	Remark
27	2130+00	26.73	23.36	27.83	61.53	51.19	40.06 (1st & 2nd Rebar Distance
28	2134+00	27.87	22.64	23.68	NA	46.32	Guard rail face**
29	2138+00	27.92	22.13	24.98	NA	47.11	Guard rail face**
30	2144.00	26.48	21.91	27.33	100.01	49.24	Nail in paved median drainage
31	2150+00	28.79	21.44	27.72	70.15	49.16	Nail in paved median drainage
32	2154+00	23.29	23.42	26.71	71.10	50.13	Nail in paved median drainage
33	2160+00	26.33	22.02	29.48	68.83	51.50	
34	2164+00	24.23	22.15	28.52	99.00	50.67	
35	2170+00	29.32	21.33	27.26	100.70	48.59	
36	2176+00	30.88	22.07	30.39	92.25	52.46	
37	2180+00	29.04	24.54	30.11	67.22	54.65	
38	2184+00	31.06	23.89	24.38	NA	48.27	Guard rail face**
39	2188+00	23.82	23.88	25.52	NA	49.40	Guard rail face**
40	2192+00	26.16	24.21	28.21	NA	52.42	Guard rail face**
41	2196+00	25.82	24.55	27.04	NA	51.59	Guard rail face**
42	2200+00	28.26	24.23	24.19	NA	48.42	Guard rail face**
43	2208+00	27.68	24.93	30.19	67.65	55.12	Nail in paved median drainage
44	2214+00	27.24	23.88	29.12	69.62	53.00	Nail in paved median drainage
45	2220+00	24.13	24.12	30.35	67.93	54.47	
46	2226+00	26.43	23.62	27.85	70.42	51.47	
47	2232+00	26.02	21.98	29.46	66.83	51.44	
48	2238+00	26.55	22.82	27.64	70.21	50.46	
49	2244+00	26.43	23.41	28.13	70.14	51.54	
50	2250+00	27.28	22.10	27.55	70.42	49.65	
51	2254+00	21.33	23.51	28.32	68.87	51.83	
52	2260+00	24.95	23.13	30.27	66.79	53.40	

* 1st rebar set at top of cut, 2nd rebar at right of way fence.

** Guard rail posts will be raised, therefore distances may be altered slightly.

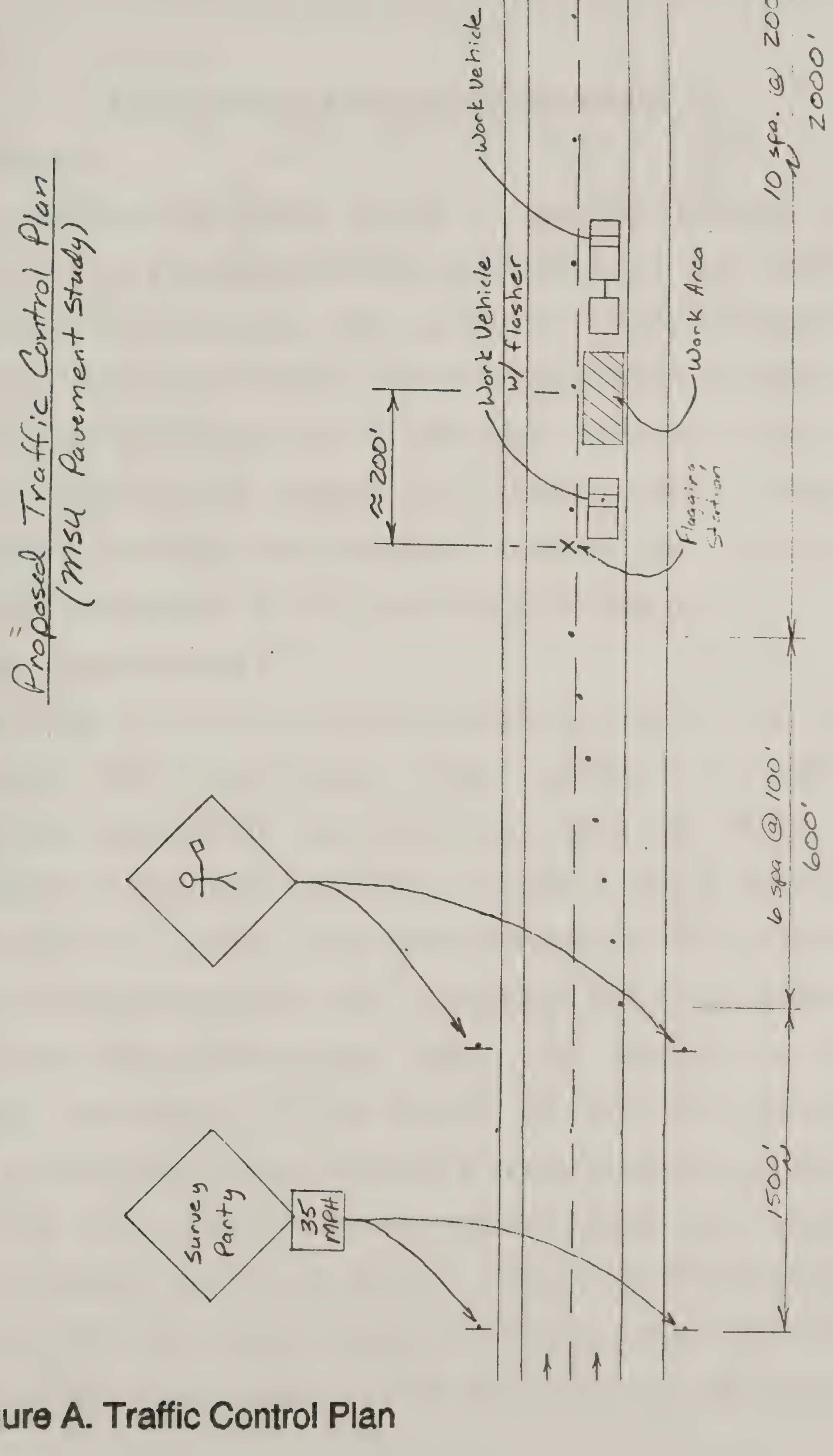


Figure A. Traffic Control Plan

the lane. Adequate channelizing devices should be available to close the entire length of lane throughout the experimental test section.

Profilograph Setting and Recording

Transportation

The profilograph crate should be secured tightly on the trailer by use of a clamping device on the trailer and rubber tie-downs strapped over the crate for the safety during transportation to and from the project site. The V-notched 2"x4" wooden blocks (located inside the crate) are nailed down on the trailer so that the profilograph can be loaded and unloaded easily during the transportation between the stations, rather than lifting the profilograph in and out of its crate at each station.

Setting the Profilograph

The string line is run between the steel pins on each side of the pavement. The center line of the pavement is marked by measuring the distance of the center line from one of the steel pins along the string line as shown in Tables A and B. Spray paint is used to mark the center line of the pavement. The profilograph is placed across the closed lane, such that the tracing wheel is set above the mark on the center point. The drum is set on the profilograph according to the sketch on the drum holder as described on the instruction booklet. A graph paper marked with the corresponding MSU station, highway station, east or west bound, driving or passing lane, and date is placed on the drum of the profilograph. The felt pen is placed on the pen holder and the drum is set such that the pen point is at the beginning of the paper.

The drum is then pushed along the profilograph beam slowly and the pavement profile is marked on the graph paper on the drum. The drum is reversed whenever the pen skips during the drawing of profile. The drum is then moved back to the original position after shifting the felt pen up or down by about an inch on the graph paper. Two identical profiles are drawn for each station. The center line (line marking the edge of the driving lane or passing lane) of the pavement is marked on the profile and the profilograph records are placed safely in an envelope. The other end of the profilograph is marked by spraying the spray paint at the base of the profilograph base for leveling purposes.

Pavement Distress Study

The distress identification manual for the long term pavement performance studies, SHRP-LTPP/FR-90-001 is used to identify the distress of the pavement in the test section. The location, type of distress, and severity level of the distress are recorded on identification cards and photographed. The type of distress may be recorded on the field book. The distress within 100 ft. up and down in the vicinity of the station are taken as the distress at the station. Some distresses are scattered over the station and others are in isolated spots.

Leveling Survey

The elevation of pavement is obtained from the differential leveling. The survey party sign with 35 mph posting are set at the beginning of the west and east bound lanes of the experimental test section. The level is then set away from the station where the level shot is taken. The level rod is set at the steel pins on both

sides of the pavement, the center line of the pavement, and the marked profilograph positions on both passing and driving lanes of both east and west bound lanes. The reading at each position is then recorded in the field book for the corresponding station.

Expenses

Following expenses were recorded for the first annual monitoring of the experimental test section.

1. Equipment Rental

2. Materials

3. Per diem and Wages

5. Data Processing and Reporting

Equipment rental

Metal detector	$ 30.00 per day for a week.	
Vehicle	$ 605.00	
Total		$ 635.00

Materials

Orange jackets	$ 25.00	
Road marker spray paints	$ 20.00	
Rolls of film	$ 14.00	
Graph paper	$ 18.00	
Film processing	$ 115.00	
Miscellaneous	$ 100.00	
Total		$ 292.00

Per diem and Wages

For total 27 man days	$ 1120.00
For total 285 man hours	$ 3426.18

Data Processing and Reporting

For total 32 man hours	$ 280.00
For total 90 man hours	$ 1200.00

Grand total	$ 6953.18	
Over head (20%)		$ 1390.63
Total Cost	$ 8343.81	

Presentation of Data

Profile Coordinates and Plot

The coordinates of the profile are established by drawing an arbitrary horizontal line with the center line end of the profile of pavement as origin. The horizontal line (X-axis) is marked at every 3 divisions (3.6" on the scale of 10 division to a foot) starting 0 origin at the center line. After marking throughout the length of the profile (44 marks to 154.8" or 12.9'), the vertical division are counted corresponding to each of the horizontal division. The vertical division reads 1/10 of an inch for each division in the scale of 1:1. The reading are tabulated for each station and each lane. The Quattro Pro spread sheet program is used to record the data. The point counted on the horizontal axis, pavement width, and profile coordinates (vertical axis) are recorded in the first three column of the table as shown in Appendix B.

The elevation of the profile at each station is derived from the differential leveling record in the field book. Since the center line of the pavement is taken as the origin, the differential leveling record at center line is subtracted from the reading at the base of the profilograph and the steel pins between the pavement. The resulting values are the elevation of the profilograph base and steel pins with respect to the center line of the pavement. This is repeated for each lane at every station. The elevation value in inch is then divided between 44 points for the straight profilograph. This gives the elevation profilograph, column 4 in the tables in Appendix B. The vertical reading of the

profile coordinates at each point (column 3) is added to the profilograph elevation (column 4) readings resulting in the coordinates of the pavement profile (column 5). The process is repeated for each station. This is a simple exercise in the Quattro Pro spread sheet, but it is a time consuming repetitious process.

The graphic plots of the profiles are obtained by plotting the coordinates (column 5) as Y-axis and column 2 converted in feet as X-axis. The plots as shown in Appendix D-G are thus obtained. The graphic plot is obtained by the graphic mode of the Quattro Pro spread sheet program. Once in the graphic mode, the text for each station is typed and the corresponding X and Y axis values are selected. The corresponding plot is printed.

The post-construction profile data are obtained from the post construction report (6). These data for corresponding station and lane are selected as the second series values in the graphic mode. The two curves are obtained and plotted overlapping each other for the purpose of comparison of the changes in pavement profiles. In some cases, the datum of a curve needs to be changed to make the curves overlap over other. This process is very time consuming. In the future, this step of comparing the pavement profiles for each and every lane and station may not be feasible. Only a few typical profiles may be chosen for the purpose of comparison.

Rut Depths

The rut depths are measured from the profiles obtained from the profilograph. A straight line is drawn between the two peaks of a wheel path. The maximum depth reading is recorded as the rut depth of the wheel path.

Appendix B

-Tables 1WD to 13WD - Coordinate System of First Annual Post-construction Pavement Profiles of West Bound Driving Lane

-Tables 1WP to 13WP - Coordinate System of First Annual Post-construction Pavement Profiles of West Bound Passing Lane

Table 1WD. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Driving Lane.

2260+00, MSU St. 1

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.000	0.000
2	3.6	0.05	-0.031	0.019
3	7.2	0.07	-0.061	0.009
4	10.8	0.09	-0.092	-0.002
5	14.4	0.07	-0.123	-0.053
6	18.0	0.05	-0.153	-0.103
7	21.6	0.05	-0.184	-0.134
8	25.2	0.03	-0.215	-0.185
9	28.8	0.03	-0.246	-0.216
10	32.4	0.07	-0.276	-0.206
11	36.0	0.09	-0.307	-0.217
12	39.6	0.10	-0.338	-0.238
13	43.2	0.16	-0.368	-0.208
14	46.8	0.20	-0.399	-0.199
15	50.4	0.18	-0.430	-0.250
16	54.0	0.20	-0.460	-0.260
17	57.6	0.25	-0.491	-0.241
18	61.2	0.26	-0.522	-0.262
19	64.8	0.29	-0.553	-0.263
20	68.4	0.30	-0.583	-0.283
21	72.0	0.32	-0.614	-0.294
22	75.6	0.32	-0.645	-0.325
23	79.2	0.33	-0.675	-0.345
24	82.8	0.32	-0.706	-0.386
25	86.4	0.32	-0.737	-0.417
26	90.0	0.31	-0.767	-0.457
27	93.6	0.24	-0.798	-0.558
28	97.2	0.22	-0.829	-0.609
29	100.8	0.21	-0.860	-0.650
30	104.4	0.22	-0.890	-0.670
31	108.0	0.23	-0.921	-0.691
32	111.6	0.25	-0.952	-0.702
33	115.2	0.28	-0.982	-0.702
34	118.8	0.29	-1.013	-0.723
35	122.4	0.31	-1.044	-0.734
36	126.0	0.31	-1.074	-0.764
37	129.6	0.31	-1.105	-0.795
38	133.2	0.30	-1.136	-0.836
39	136.8	0.30	-1.167	-0.867
40	140.4	0.22	-1.197	-0.977
41	144.0	0.18	-1.228	-1.048
42	147.6	0.05	-1.259	-1.209
43	151.2	-0.06	-1.289	-1.349
44	154.8	-0.15	-1.320	-1.470

2254+00, MSU St. 2

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.000	0.000
2	3.6	0.03	-0.033	-0.003
3	7.2	0.02	-0.067	-0.047
4	10.8	0.04	-0.100	-0.060
5	14.4	0.04	-0.134	-0.094
6	18.0	0.01	-0.167	-0.157
7	21.6	0.02	-0.201	-0.181
8	25.2	0.05	-0.234	-0.184
9	28.8	0.03	-0.268	-0.238
10	32.4	0.03	-0.301	-0.271
11	36.0	0.05	-0.335	-0.285
12	39.6	0.07	-0.368	-0.298
13	43.2	0.11	-0.402	-0.292
14	46.8	0.15	-0.435	-0.285
15	50.4	0.17	-0.469	-0.299
16	54.0	0.18	-0.502	-0.322
17	57.6	0.23	-0.536	-0.306
18	61.2	0.26	-0.569	-0.309
19	64.8	0.27	-0.603	-0.333
20	68.4	0.29	-0.636	-0.346
21	72.0	0.31	-0.670	-0.360
22	75.6	0.31	-0.703	-0.393
23	79.2	0.33	-0.737	-0.407
24	82.8	0.33	-0.770	-0.440
25	86.4	0.32	-0.804	-0.484
26	90.0	0.27	-0.837	-0.567
27	93.6	0.25	-0.871	-0.621
28	97.2	0.23	-0.904	-0.674
29	100.8	0.24	-0.938	-0.698
30	104.4	0.22	-0.971	-0.751
31	108.0	0.21	-1.005	-0.795
32	111.6	0.23	-1.038	-0.808
33	115.2	0.23	-1.072	-0.842
34	118.8	0.24	-1.105	-0.865
35	122.4	0.28	-1.139	-0.859
36	126.0	0.33	-1.172	-0.842
37	129.6	0.31	-1.206	-0.896
38	133.2	0.27	-1.239	-0.969
39	136.8	0.26	-1.273	-1.013
40	140.4	0.23	-1.306	-1.076
41	144.0	0.22	-1.340	-1.120
42	147.6	0.14	-1.373	-1.233
43	151.2	0.01	-1.407	-1.397
44	154.8	-0.10	-1.440	-1.540

Table 2WD. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Driving Lane.

2250+00, MSU St. 3

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.000	0.000
2	3.6	0.07	-0.038	0.032
3	7.2	0.12	-0.075	0.045
4	10.8	0.13	-0.113	0.017
5	14.4	0.14	-0.151	-0.011
6	18.0	0.10	-0.188	-0.088
7	21.6	0.10	-0.226	-0.126
8	25.2	0.12	-0.264	-0.144
9	28.8	0.10	-0.301	-0.201
10	32.4	0.13	-0.339	-0.209
11	36.0	0.15	-0.377	-0.227
12	39.6	0.17	-0.414	-0.244
13	43.2	0.20	-0.452	-0.252
14	46.8	0.23	-0.490	-0.260
15	50.4	0.26	-0.527	-0.267
16	54.0	0.28	-0.565	-0.285
17	57.6	0.32	-0.603	-0.283
18	61.2	0.35	-0.640	-0.290
19	64.8	0.36	-0.678	-0.318
20	68.4	0.37	-0.716	-0.346
21	72.0	0.37	-0.753	-0.383
22	75.6	0.37	-0.791	-0.421
23	79.2	0.38	-0.829	-0.449
24	82.8	0.37	-0.867	-0.497
25	86.4	0.35	-0.904	-0.554
26	90.0	0.34	-0.942	-0.602
27	93.6	0.29	-0.980	-0.690
28	97.2	0.27	-1.017	-0.747
29	100.8	0.26	-1.055	-0.795
30	104.4	0.25	-1.093	-0.843
31	108.0	0.25	-1.130	-0.880
32	111.6	0.23	-1.168	-0.938
33	115.2	0.25	-1.206	-0.956
34	118.8	0.25	-1.243	-0.993
35	122.4	0.27	-1.281	-1.011
36	126.0	0.26	-1.319	-1.059
37	129.6	0.24	-1.356	-1.116
38	133.2	0.25	-1.394	-1.144
39	136.8	0.25	-1.432	-1.182
40	140.4	0.24	-1.469	-1.229
41	144.0	0.24	-1.507	-1.267
42	147.6	0.19	-1.545	-1.355
43	151.2	0.12	-1.582	-1.462
44	154.8	-0.05	-1.620	-1.670

2244+00, MSU St. 4

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.000	0.000
2	3.6	0.05	-0.041	0.009
3	7.2	0.09	-0.083	0.007
4	10.8	0.10	-0.124	-0.024
5	14.4	0.08	-0.166	-0.086
6	18.0	0.10	-0.207	-0.107
7	21.6	0.10	-0.249	-0.149
8	25.2	0.11	-0.290	-0.180
9	28.8	0.11	-0.331	-0.221
10	32.4	0.14	-0.373	-0.233
11	36.0	0.17	-0.414	-0.244
12	39.6	0.21	-0.456	-0.246
13	43.2	0.23	-0.497	-0.267
14	46.8	0.26	-0.539	-0.279
15	50.4	0.30	-0.580	-0.280
16	54.0	0.34	-0.621	-0.281
17	57.6	0.37	-0.663	-0.293
18	61.2	0.42	-0.704	-0.284
19	64.8	0.43	-0.746	-0.316
20	68.4	0.46	-0.787	-0.327
21	72.0	0.48	-0.829	-0.349
22	75.6	0.50	-0.870	-0.370
23	79.2	0.52	-0.911	-0.391
24	82.8	0.49	-0.953	-0.463
25	86.4	0.48	-0.994	-0.514
26	90.0	0.42	-1.036	-0.616
27	93.6	0.41	-1.077	-0.667
28	97.2	0.37	-1.119	-0.749
29	100.8	0.35	-1.160	-0.810
30	104.4	0.39	-1.201	-0.811
31	108.0	0.37	-1.243	-0.873
32	111.6	0.36	-1.284	-0.924
33	115.2	0.38	-1.326	-0.946
34	118.8	0.38	-1.367	-0.987
35	122.4	0.40	-1.409	-1.009
36	126.0	0.41	-1.450	-1.040
37	129.6	0.42	-1.491	-1.071
38	133.2	0.41	-1.533	-1.123
39	136.8	0.39	-1.574	-1.184
40	140.4	0.39	-1.616	-1.226
41	144.0	0.26	-1.657	-1.397
42	147.6	0.15	-1.699	-1.549
43	151.2			0.000
44	154.8			0.000

Table 3WD. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Driving Lane.

2238+00, MSU St. 5

Point	Pavement	Profilograph	Profilograph	Pavement
	Width (X)	Coordinates	Level (in)	Elevation(Y)
1	0.0	0.00	0.000	0.000
2	3.6	0.04	-0.030	0.010
3	7.2	0.07	-0.060	0.010
4	10.8	0.09	-0.090	0.000
5	14.4	0.09	-0.120	-0.030
6	18.0	0.10	-0.150	-0.050
7	21.6	0.09	-0.180	-0.090
8	25.2	0.06	-0.210	-0.150
9	28.8	0.12	-0.240	-0.120
10	32.4	0.14	-0.270	-0.130
11	36.0	0.16	-0.300	-0.140
12	39.6	0.23	-0.330	-0.100
13	43.2	0.26	-0.360	-0.100
14	46.8	0.29	-0.390	-0.100
15	50.4	0.33	-0.420	-0.090
16	54.0	0.36	-0.450	-0.090
17	57.6	0.37	-0.480	-0.110
18	61.2	0.42	-0.510	-0.090
19	64.8	0.45	-0.540	-0.090
20	68.4	0.48	-0.570	-0.090
21	72.0	0.47	-0.600	-0.130
22	75.6	0.48	-0.630	-0.150
23	79.2	0.49	-0.660	-0.170
24	82.8	0.48	-0.690	-0.210
25	86.4	0.48	-0.720	-0.240
26	90.0	0.48	-0.750	-0.270
27	93.6	0.43	-0.780	-0.350
28	97.2	0.43	-0.810	-0.380
29	100.8	0.45	-0.840	-0.390
30	104.4	0.45	-0.870	-0.420
31	108.0	0.46	-0.900	-0.440
32	111.6	0.48	-0.930	-0.450
33	115.2	0.49	-0.960	-0.470
34	118.8	0.52	-0.990	-0.470
35	122.4	0.52	-1.020	-0.500
36	126.0	0.52	-1.050	-0.530
37	129.6	0.55	-1.080	-0.530
38	133.2	0.52	-1.110	-0.590
39	136.8	0.51	-1.140	-0.630
40	140.4	0.50	-1.170	-0.670
41	144.0	0.44	-1.200	-0.760
42	147.6	0.33	-1.230	-0.900
43	151.2	0.22	-1.260	-1.040
44	154.8			0.000

2232+00, MSU St. 6

Point	Pavement	Profilograph	Profilograph	Pavement
	Width (X)	Coordinates	Level (in)	Elevation(Y)
1	0.0	0.00	0.000	0.000
2	3.6	0.03	-0.032	-0.002
3	7.2	0.06	-0.064	-0.004
4	10.8	0,07	-0.096	-0.026
5	14.4	0.09	-0.128	-0.038
6	18.0	0.08	-0.160	-0.080
7	21.6	0.09	-0.193	-0.103
8	25.2	0.11	-0.225	-0.115
9	28.8	0.13	-0.257	-0.127
10	32.4	0.17	-0.289	-0.119
11	36.0	0.19	-0.321	-0.131
12	39.6	0.23	-0.353	-0.123
13	43.2	0.25	-0.385	-0.135
14	46.8	0.31	-0.417	-0.107
15	50.4	0.34	-0.449	-0.109
16	54.0	0.38	-0.481	-0.101
17	57.6	0.42	-0.513	-0.093
18	61.2	0.45	-0.546	-0.096
19	64.8	0.48	-0.578	-0.098
20	68.4	0.50	-0.610	-0.110
21	72.0	0.51	-0.642	-0.132
22	75.6	0.53	-0.674	-0.144
23	79.2	0.57	-0.706	-0.136
24	82.8	0.55	-0.738	-0.188
25	86.4	0.51	-0.770	-0.260
26	90.0	0.51	-0.802	-0.292
27	93.6	0.49	-0.834	-0.344
28	97.2	0.48	-0.867	-0.387
29	100.8	0.48	-0.899	-0.419
30	104.4	0.48	-0.931	-0.451
31	108.0	0.49	-0.963	-0.473
32	111.6	0.49	-0.995	-0.505
33	115.2	0.53	-1.027	-0.497
34	118.8	0.55	-1.059	-0.509
35	122.4	0.57	-1.091	-0.521
36	126.0	0.57	-1.123	-0.553
37	129.6	0.58	-1.155	-0.575
38	133.2	0.59	-1.187	-0.597
39	136.8	0.63	-1.220	-0.590
40	140.4	0.55	-1.252	-0.702
41	144.0	0.46	-1.284	-0.824
42	147.6	0.30	-1.316	-1.016
43	151.2	0.16	-1.348	-1.188
44	154.8	0.06	-1.380	-1.320

Table 4WD. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Driving Lane.

2226+00, MSU St. 7

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.04	-0.04	0.00
3	7.2	0.06	-0.08	-0.02
4	10.8	0.08	-0.12	-0.04
5	14.4	0.07	-0.15	-0.08
6	18.0	0.08	-0.19	-0.11
7	21.6	0.10	-0.23	-0.13
8	25.2	0.10	-0.27	-0.17
9	28.8	0.13	-0.31	-0.18
10	32.4	0.19	-0.35	-0.16
11	36.0	0.20	-0.39	-0.19
12	39.6	0.25	-0.42	-0.17
13	43.2	0.29	-0.46	-0.17
14	46.8	0.30	-0.50	-0.20
15	50.4	0.34	-0.54	-0.20
16	54.0	0.40	-0.58	-0.18
17	57.6	0.41	-0.62	-0.21
18	61.2	0.44	-0.66	-0.22
19	64.8	0.49	-0.69	-0.20
20	68.4	0.50	-0.73	-0.23
21	72.0	0.51	-0.77	-0.26
22	75.6	0.52	-0.81	-0.29
23	79.2	0.54	-0.85	-0.31
24	82.8	0.52	-0.89	-0.37
25	86.4	0.51	-0.93	-0.42
26	90.0	0.51	-0.96	-0.45
27	93.6	0.50	-1.00	-0.50
28	97.2	0.50	-1.04	-0.54
29	100.8	0.51	-1.08	-0.57
30	104.4	0.51	-1.12	-0.61
31	108.0	0.55	-1.16	-0.61
32	111.6	0.58	-1.20	-0.62
33	115.2	0.58	-1.23	-0.65
34	118.8	0.59	-1.27	-0.68
35	122.4	0.59	-1.31	-0.72
36	126.0	0.59	-1.35	-0.76
37	129.6	0.60	-1.39	-0.79
38	133.2	0.62	-1.43	-0.81
39	136.8	0.50	-1.47	-0.97
40	140.4	0.38	-1.50	-1.12
41	144.0	0.25	-1.54	-1.29
42	147.6	0.14	-1.58	-1.44
43	151.2	0.05	-1.62	-1.57
44	154.8			0.00

2220+00, MSU St. 8

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.04	-0.04	0.00
3	7.2	0.07	-0.07	-0.00
4	10.8	0.08	-0.11	-0.03
5	14.4	0.09	-0.15	-0.06
6	18.0	0.09	-0.19	-0.10
7	21.6	0.10	-0.22	-0.12
8	25.2	0.11	-0.26	-0.15
9	28.8	0.17	-0.30	-0.13
10	32.4	0.20	-0.33	-0.13
11	36.0	0.22	-0.37	-0.15
12	39.6	0.28	-0.41	-0.13
13	43.2	0.30	-0.45	-0.15
14	46.8	0.34	-0.48	-0.14
15	50.4	0.39	-0.52	-0.13
16	54.0	0.41	-0.56	-0.15
17	57.6	0.42	-0.59	-0.17
18	61.2	0.46	-0.63	-0.17
19	64.8	0.49	-0.67	-0.18
20	68.4	0.49	-0.71	-0.22
21	72.0	0.50	-0.74	-0.24
22	75.6	0.50	-0.78	-0.28
23	79.2	0.50	-0.82	-0.32
24	82.8	0.49	-0.85	-0.36
25	86.4	0.47	-0.89	-0.42
26	90.0	0.45	-0.93	-0.48
27	93.6	0.42	-0.97	-0.55
28	97.2	0.41	-1.00	-0.59
29	100.8	0.41	-1.04	-0.63
30	104.4	0.42	-1.08	-0.66
31	108.0	0.45	-1.11	-0.66
32	111.6	0.48	-1.15	-0.67
33	115.2	0.50	-1.19	-0.69
34	118.8	0.51	-1.23	-0.72
35	122.4	0.51	-1.26	-0.75
36	126.0	0.51	-1.30	-0.79
37	129.6	0.52	-1.34	-0.82
38	133.2	0.53	-1.37	-0.84
39	136.8	0.51	-1.41	-0.90
40	140.4	0.44	-1.45	-1.01
41	144.0	0.36	-1.49	-1.13
42	147.6	0.24	-1.52	-1.28
43	151.2	0.13	-1.56	-1.43
44	154.8			0.00

Table 5WD. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Driving Lane.

2214+00, MSU St. 9

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.05	-0.04	0.01
3	7.2	0.09	-0.08	0.01
4	10.8	0.10	-0.12	-0.02
5	14.4	0.11	-0.16	-0.05
6	18.0	0.11	-0.20	-0.09
7	21.6	0.11	-0.24	-0.13
8	25.2	0.11	-0.28	-0.17
9	28.8	0.13	-0.32	-0.19
10	32.4	0.19	-0.36	-0.17
11	36.0	0.20	-0.40	-0.20
12	39.6	0.22	-0.45	-0.23
13	43.2	0.29	-0.49	-0.20
14	46.8	0.31	-0.53	-0.22
15	50.4	0.34	-0.57	-0.23
16	54.0	0.40	-0.61	-0.21
17	57.6	0.41	-0.65	-0.24
18	61.2	0.49	-0.69	-0.20
19	64.8	0.50	-0.73	-0.23
20	68.4	0.51	-0.77	-0.26
21	72.0	0.54	-0.81	-0.27
22	75.6	0.56	-0.85	-0.29
23	79.2	0.57	-0.89	-0.32
24	82.8	0.57	-0.93	-0.36
25	86.4	0.55	-0.97	-0.42
26	90.0	0.53	-1.01	-0.48
27	93.6	0.52	-1.05	-0.53
28	97.2	0.52	-1.09	-0.57
29	100.8	0.51	-1.13	-0.62
30	104.4	0.51	-1.17	-0.66
31	108.0	0.52	-1.21	-0.69
32	111.6	0.52	-1.25	-0.73
33	115.2	0.53	-1.29	-0.76
34	118.8	0.54	-1.34	-0.80
35	122.4	0.56	-1.38	-0.82
36	126.0	0.57	-1.42	-0.85
37	129.6	0.59	-1.46	-0.87
38	133.2	0.60	-1.50	-0.90
39	136.8	0.61	-1.54	-0.93
40	140.4	0.54	-1.58	-1.04
41	144.0	0.41	-1.62	-1.21
42	147.6	0.25	-1.66	-1.41
43	151.2	0.12	-1.70	-1.58
44	154.8	0.00	-1.74	-1.74

2208+00, MSU St. 10

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.05	-0.05	0.00
3	7.2	0.09	-0.09	-0.00
4	10.8	0.09	-0.14	-0.05
5	14.4	0.09	-0.18	-0.09
6	18.0	0.10	-0.23	-0.13
7	21.6	0.12	-0.28	-0.16
8	25.2	0.12	-0.32	-0.20
9	28.8	0.18	-0.37	-0.19
10	32.4	0.20	-0.41	-0.21
11	36.0	0.21	-0.46	-0.25
12	39.6	0.25	-0.51	-0.26
13	43.2	0.30	-0.55	-0.25
14	46.8	0.32	-0.60	-0.28
15	50.4	0.38	-0.64	-0.26
16	54.0	0.40	-0.69	-0.29
17	57.6	0.43	-0.74	-0.31
18	61.2	0.48	-0.78	-0.30
19	64.8	0.50	-0.83	-0.33
20	68.4	0.50	-0.87	-0.37
21	72.0	0.51	-0.92	-0.41
22	75.6	0.53	-0.97	-0.44
23	79.2	0.55	-1.01	-0.46
24	82.8	0.55	-1.06	-0.51
25	86.4	0.54	-1.11	-0.57
26	90.0	0.51	-1.15	-0.64
27	93.6	0.50	-1.20	-0.70
28	97.2	0.51	-1.24	-0.73
29	100.8	0.51	-1.29	-0.78
30	104.4	0.52	-1.34	-0.82
31	108.0	0.55	-1.38	-0.83
32	111.6	0.58	-1.43	-0.85
33	115.2	0.59	-1.47	-0.88
34	118.8	0.60	-1.52	-0.92
35	122.4	0.60	-1.57	-0.97
36	126.0	0.60	-1.61	-1.01
37	129.6	0.61	-1.66	-1.05
38	133.2	0.62	-1.70	-1.08
39	136.8	0.59	-1.75	-1.16
40	140.4	0.50	-1.80	-1.30
41	144.0	0.36	-1.84	-1.48
42	147.6	0.21	-1.89	-1.68
43	151.2	0.09	-1.93	-1.84
44	154.8	0.00	-1.98	-1.98

Table 6WD. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Driving Lane.

2200+00, MSU St. 11

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.06	-0.04	0.02
3	7.2	0.12	-0.08	0.04
4	10.8	0.11	-0.13	-0.02
5	14.4	0.05	-0.17	-0.12
6	18.0	-0.05	-0.21	-0.26
7	21.6	-0.14	-0.25	-0.39
8	25.2	-0.13	-0.29	-0.42
9	28.8	-0.05	-0.33	-0.38
10	32.4	-0.01	-0.38	-0.39
11	36.0	0.01	-0.42	-0.41
12	39.6	0.08	-0.46	-0.38
13	43.2	0.25	-0.50	-0.25
14	46.8	0.38	-0.54	-0.16
15	50.4	0.45	-0.59	-0.14
16	54.0	0.52	-0.63	-0.11
17	57.6	0.54	-0.67	-0.13
18	61.2	0.54	-0.71	-0.17
19	64.8	0.55	-0.75	-0.20
20	68.4	0.55	-0.80	-0.25
21	72.0	0.56	-0.84	-0.28
22	75.6	0.56	-0.88	-0.32
23	79.2	0.57	-0.92	-0.35
24	82.8	0.57	-0.96	-0.39
25	86.4	0.51	-1.00	-0.49
26	90.0	0.43	-1.05	-0.62
27	93.6	0.33	-1.09	-0.76
28	97.2	0.27	-1.13	-0.86
29	100.8	0.28	-1.17	-0.89
30	104.4	0.31	-1.21	-0.90
31	108.0	0.33	-1.26	-0.93
32	111.6	0.35	-1.30	-0.95
33	115.2	0.45	-1.34	-0.89
34	118.8	0.62	-1.38	-0.76
35	122.4	0.71	-1.42	-0.71
36	126.0	0.65	-1.47	-0.82
37	129.6	0.57	-1.51	-0.94
38	133.2	0.53	-1.55	-1.02
39	136.8	0.44	-1.59	-1.15
40	140.4	0.33	-1.63	-1.30
41	144.0	0.20	-1.67	-1.47
42	147.6	0.17	-1.72	-1.55
43	151.2	-0.03	-1.76	-1.79
44	154.8	-0.05	-1.80	-1.85

2196+00, MSU St. 12

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.1	-0.03	0.07
3	7.2	0.20	-0.06	0.14
4	10.8	0.25	-0.10	0.15
5	14.4	0.22	-0.13	0.09
6	18.0	0.17	-0.16	0.01
7	21.6	0.05	-0.19	-0.14
8	25.2	-0.03	-0.22	-0.25
9	28.8	0.00	-0.26	-0.26
10	32.4	0.07	-0.29	-0.22
11	36.0	0.08	-0.32	-0.24
12	39.6	0.10	-0.35	-0.25
13	43.2	0.18	-0.39	-0.21
14	46.8	0.32	-0.42	-0.10
15	50.4	0.45	-0.45	0.00
16	54.0	0.52	-0.48	0.04
17	57.6	0.58	-0.51	0.07
18	61.2	0.60	-0.55	0.05
19	64.8	0.59	-0.58	0.01
20	68.4	0.59	-0.61	-0.02
21	72.0	0.60	-0.64	-0.04
22	75.6	0.61	-0.67	-0.06
23	79.2	0.61	-0.71	-0.10
24	82.8	0.60	-0.74	-0.14
25	86.4	0.59	-0.77	-0.18
26	90.0	0.57	-0.80	-0.23
27	93.6	0.45	-0.83	-0.38
28	97.2	0.34	-0.87	-0.53
29	100.8	0.29	-0.90	-0.61
30	104.4	0.30	-0.93	-0.63
31	108.0	0.34	-0.96	-0.62
32	111.6	0.34	-0.99	-0.65
33	115.2	0.37	-1.03	-0.66
34	118.8	0.50	-1.06	-0.56
35	122.4	0.63	-1.09	-0.46
36	126.0	0.74	-1.12	-0.38
37	129.6	0.79	-1.16	-0.37
38	133.2	0.69	-1.19	-0.50
39	136.8	0.52	-1.22	-0.70
40	140.4	0.49	-1.25	-0.76
41	144.0	0.35	-1.28	-0.93
42	147.6	0.23	-1.32	-1.09
43	151.2	0.10	-1.35	-1.25
44	154.8	0.00	-1.38	-1.38

Table 7WD. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Driving Lane.

2192+00, MSU St. 13

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.07	-0.04	0.03
3	7.2	0.08	-0.08	0.00
4	10.8	0.05	-0.11	-0.06
5	14.4	-0.03	-0.15	-0.18
6	18.0	-0.12	-0.19	-0.31
7	21.6	-0.13	-0.23	-0.36
8	25.2	-0.05	-0.26	-0.31
9	28.8	-0.01	-0.30	-0.31
10	32.4	-0.02	-0.34	-0.36
11	36.0	0.03	-0.38	-0.35
12	39.6	0.17	-0.41	-0.24
13	43.2	0.32	-0.45	-0.13
14	46.8	0.42	-0.49	-0.07
15	50.4	0.47	-0.53	-0.06
16	54.0	0.50	-0.57	-0.07
17	57.6	0.53	-0.60	-0.07
18	61.2	0.55	-0.64	-0.09
19	64.8	0.56	-0.68	-0.12
20	68.4	0.57	-0.72	-0.15
21	72.0	0.57	-0.75	-0.18
22	75.6	0.57	-0.79	-0.22
23	79.2	0.57	-0.83	-0.26
24	82.8	0.52	-0.87	-0.35
25	86.4	0.46	-0.90	-0.44
26	90.0	0.33	-0.94	-0.61
27	93.6	0.25	-0.98	-0.73
28	97.2	0.27	-1.02	-0.75
29	100.8	0.31	-1.05	-0.74
30	104.4	0.29	-1.09	-0.80
31	108.0	0.32	-1.13	-0.81
32	111.6	0.43	-1.17	-0.74
33	115.2	0.57	-1.21	-0.64
34	118.8	0.67	-1.24	-0.57
35	122.4	0.76	-1.28	-0.52
36	126.0	0.76	-1.32	-0.56
37	129.6	0.66	-1.36	-0.70
38	133.2	0.57	-1.39	-0.82
39	136.8	0.49	-1.43	-0.94
40	140.4	0.42	-1.47	-1.05
41	144.0	0.32	-1.51	-1.19
42	147.6	0.18	-1.54	-1.36
43	151.2	0.08	-1.58	-1.50
44	154.8	0.00	-1.62	-1.62

2188+00, MSU St. 14

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.07	-0.03	0.04
3	7.2	0.07	-0.07	0.00
4	10.8	0.02	-0.10	-0.08
5	14.4	-0.08	-0.14	-0.22
6	18.0	-0.09	-0.17	-0.26
7	21.6	-0.06	-0.21	-0.27
8	25.2	-0.03	-0.24	-0.27
9	28.8	-0.03	-0.28	-0.31
10	32.4	0.04	-0.31	-0.27
11	36.0	0.13	-0.35	-0.22
12	39.6	0.21	-0.38	-0.17
13	43.2	0.32	-0.42	-0.10
14	46.8	0.46	-0.45	0.01
15	50.4	0.51	-0.49	0.02
16	54.0	0.52	-0.52	-0.00
17	57.6	0.51	-0.56	-0.05
18	61.2	0.53	-0.59	-0.06
19	64.8	0.57	-0.63	-0.06
20	68.4	0.59	-0.66	-0.07
21	72.0	0.60	-0.70	-0.10
22	75.6	0.61	-0.73	-0.12
23	79.2	0.59	-0.77	-0.18
24	82.8	0.52	-0.80	-0.28
25	86.4	0.44	-0.84	-0.40
26	90.0	0.39	-0.87	-0.48
27	93.6	0.33	-0.91	-0.58
28	97.2	0.36	-0.94	-0.58
29	100.8	0.34	-0.98	-0.64
30	104.4	0.38	-1.01	-0.63
31	108.0	0.46	-1.05	-0.59
32	111.6	0.52	-1.08	-0.56
33	115.2	0.61	-1.12	-0.51
34	118.8	0.75	-1.15	-0.40
35	122.4	0.84	-1.19	-0.35
36	126.0	0.80	-1.22	-0.42
37	129.6	0.66	-1.26	-0.60
38	133.2	0.61	-1.29	-0.68
39	136.8	0.52	-1.33	-0.81
40	140.4	0.42	-1.36	-0.94
41	144.0	0.32	-1.40	-1.08
42	147.6	0.20	-1.43	-1.23
43	151.2	0.11	-1.47	-1.36
44	154.8	-0.07	-1.50	-1.57

Table 8WD. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Driving Lane.

2184+00, MSU St. 15

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.02	-0.04	-0.02
3	7.2	0.00	-0.07	-0.07
4	10.8	-0.10	-0.11	-0.21
5	14.4	-0.17	-0.14	-0.31
6	18.0	-0.13	-0.18	-0.31
7	21.6	-0.10	-0.21	-0.31
8	25.2	-0.09	-0.25	-0.34
9	28.8	-0.04	-0.29	-0.33
10	32.4	0.05	-0.32	-0.27
11	36.0	0.17	-0.36	-0.19
12	39.6	0.30	-0.39	-0.09
13	43.2	0.40	-0.43	-0.03
14	46.8	0.48	-0.46	0.02
15	50.4	0.49	-0.50	-0.01
16	54.0	0.49	-0.54	-0.05
17	57.6	0.49	-0.57	-0.08
18	61.2	0.50	-0.61	-0.11
19	64.8	0.50	-0.64	-0.14
20	68.4	0.50	-0.68	-0.18
21	72.0	0.50	-0.71	-0.21
22	75.6	0.50	-0.75	-0.25
23	79.2	0.44	-0.79	-0.35
24	82.8	0.36	-0.82	-0.46
25	86.4	0.28	-0.86	-0.58
26	90.0	0.24	-0.89	-0.65
27	93.6	0.29	-0.93	-0.64
28	97.2	0.30	-0.96	-0.66
29	100.8	0.30	-1.00	-0.70
30	104.4	0.38	-1.04	-0.66
31	108.0	0.49	-1.07	-0.58
32	111.6	0.60	-1.11	-0.51
33	115.2	0.70	-1.14	-0.44
34	118.8	0.71	-1.18	-0.47
35	122.4	0.70	-1.21	-0.51
36	126.0	0.55	-1.25	-0.70
37	129.6	0.49	-1.29	-0.80
38	133.2	0.43	-1.32	-0.89
39	136.8	0.32	-1.36	-1.04
40	140.4	0.26	-1.39	-1.13
41	144.0	0.14	-1.43	-1.29
42	147.6	0.01	-1.46	-1.45
43	151.2	-0.09	-1.50	-1.59
44	154.8			0.00

2180+00, MSU St. 16

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.09	-0.03	0.06
3	7.2	0.15	-0.07	0.08
4	10.8	0.17	-0.10	0.07
5	14.4	0.10	-0.14	-0.04
6	18.0	0.02	-0.17	-0.15
7	21.6	-0.02	-0.21	-0.23
8	25.2	-0.01	-0.24	-0.25
9	28.8	0.03	-0.27	-0.24
10	32.4	0.09	-0.31	-0.22
11	36.0	0.10	-0.34	-0.24
12	39.6	0.20	-0.38	-0.18
13	43.2	0.34	-0.41	-0.07
14	46.8	0.47	-0.45	0.02
15	50.4	0.52	-0.48	0.04
16	54.0	0.55	-0.51	0.04
17	57.6	0.58	-0.55	0.03
18	61.2	0.59	-0.58	0.01
19	64.8	0.60	-0.62	-0.02
20	68.4	0.61	-0.65	-0.04
21	72.0	0.65	-0.69	-0.04
22	75.6	0.66	-0.72	-0.06
23	79.2	0.64	-0.75	-0.11
24	82.8	0.61	-0.79	-0.18
25	86.4	0.59	-0.82	-0.23
26	90.0	0.50	-0.86	-0.36
27	93.6	0.40	-0.89	-0.49
28	97.2	0.39	-0.93	-0.54
29	100.8	0.40	-0.96	-0.56
30	104.4	0.41	-0.99	-0.58
31	108.0	0.42	-1.03	-0.61
32	111.6	0.50	-1.06	-0.56
33	115.2	0.58	-1.10	-0.52
34	118.8	0.70	-1.13	-0.43
35	122.4	0.75	-1.17	-0.42
36	126.0	0.70	-1.20	-0.50
37	129.6	0.69	-1.23	-0.54
38	133.2	0.61	-1.27	-0.66
39	136.8	0.50	-1.30	-0.80
40	140.4	0.40	-1.34	-0.94
41	144.0	0.29	-1.37	-1.08
42	147.6	0.17	-1.41	-1.24
43	151.2	0.05	-1.44	-1.39
44	154.8			0.00

Table 9WD. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Driving Lane.

2176+00, MSU St. 17

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.02	-0.04	-0.02
3	7.2	0.05	-0.09	-0.04
4	10.8	0.06	-0.13	-0.07
5	14.4	0.04	-0.18	-0.14
6	18.0	-0.04	-0.22	-0.26
7	21.6	-0.05	-0.27	-0.32
8	25.2	-0.05	-0.31	-0.36
9	28.8	-0.04	-0.36	-0.40
10	32.4	-0.04	-0.40	-0.44
11	36.0	-0.02	-0.45	-0.47
12	39.6	0.05	-0.49	-0.44
13	43.2	0.15	-0.54	-0.39
14	46.8	0.23	-0.58	-0.35
15	50.4	0.31	-0.63	-0.32
16	54.0	0.41	-0.67	-0.26
17	57.6	0.45	-0.71	-0.26
18	61.2	0.45	-0.76	-0.31
19	64.8	0.47	-0.80	-0.33
20	68.4	0.51	-0.85	-0.34
21	72.0	0.51	-0.89	-0.38
22	75.6	0.53	-0.94	-0.41
23	79.2	0.50	-0.98	-0.48
24	82.8	0.46	-1.03	-0.57
25	86.4	0.43	-1.07	-0.64
26	90.0	0.35	-1.12	-0.77
27	93.6	0.27	-1.16	-0.89
28	97.2	0.26	-1.21	-0.95
29	100.8	0.26	-1.25	-0.99
30	104.4	0.25	-1.29	-1.04
31	108.0	0.25	-1.34	-1.09
32	111.6	0.30	-1.38	-1.08
33	115.2	0.33	-1.43	-1.10
34	118.8	0.37	-1.47	-1.10
35	122.4	0.45	-1.52	-1.07
36	126.0	0.45	-1.56	-1.11
37	129.6	0.44	-1.61	-1.17
38	133.2	0.43	-1.65	-1.22
39	136.8	0.35	-1.70	-1.35
40	140.4	0.25	-1.74	-1.49
41	144.0	0.15	-1.79	-1.64
42	147.6	0.05	-1.83	-1.78
43	151.2	-0.05	-1.88	-1.93
44	154.8	-0.15	-1.92	-2.07

2170+00, MSU St. 18

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.01	-0.04	-0.03
3	7.2	0.02	-0.07	-0.05
4	10.8	0.03	-0.11	-0.08
5	14.4	0.04	-0.15	-0.11
6	18.0	0.09	-0.18	-0.09
7	21.6	0.10	-0.22	-0.12
8	25.2	0.12	-0.25	-0.13
9	28.8	0.16	-0.29	-0.13
10	32.4	0.20	-0.33	-0.13
11	36.0	0.24	-0.36	-0.12
12	39.6	0.30	-0.40	-0.10
13	43.2	0.36	-0.44	-0.08
14	46.8	0.40	-0.47	-0.07
15	50.4	0.41	-0.51	-0.10
16	54.0	0.48	-0.54	-0.06
17	57.6	0.49	-0.58	-0.09
18	61.2	0.51	-0.62	-0.11
19	64.8	0.53	-0.65	-0.12
20	68.4	0.56	-0.69	-0.13
21	72.0	0.59	-0.73	-0.14
22	75.6	0.60	-0.76	-0.16
23	79.2	0.56	-0.80	-0.24
24	82.8	0.53	-0.83	-0.30
25	86.4	0.51	-0.87	-0.36
26	90.0	0.49	-0.91	-0.42
27	93.6	0.47	-0.94	-0.47
28	97.2	0.48	-0.98	-0.50
29	100.8	0.48	-1.02	-0.54
30	104.4	0.49	-1.05	-0.56
31	108.0	0.51	-1.09	-0.58
32	111.6	0.52	-1.12	-0.60
33	115.2	0.56	-1.16	-0.60
34	118.8	0.58	-1.20	-0.62
35	122.4	0.59	-1.23	-0.64
36	126.0	0.59	-1.27	-0.68
37	129.6	0.60	-1.31	-0.71
38	133.2	0.58	-1.34	-0.76
39	136.8	0.50	-1.38	-0.88
40	140.4	0.41	-1.41	-1.00
41	144.0	0.33	-1.45	-1.12
42	147.6	0.21	-1.49	-1.28
43	151.2	0.10	-1.52	-1.42
44	154.8	-0.03	-1.56	-1.59

Table 10WD. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Driving Lane.

2164+00, MSU St. 19

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.02	-0.04	-0.02
3	7.2	0.04	-0.07	-0.03
4	10.8	0.06	-0.11	-0.05
5	14.4	0.07	-0.15	-0.08
6	18.0	0.10	-0.18	-0.08
7	21.6	0.11	-0.22	-0.11
8	25.2	0.13	-0.25	-0.12
9	28.8	0.17	-0.29	-0.12
10	32.4	0.20	-0.33	-0.13
11	36.0	0.22	-0.36	-0.14
12	39.6	0.30	-0.40	-0.10
13	43.2	0.34	-0.44	-0.10
14	46.8	0.38	-0.47	-0.09
15	50.4	0.41	-0.51	-0.10
16	54.0	0.48	-0.54	-0.06
17	57.6	0.50	-0.58	-0.08
18	61.2	0.57	-0.62	-0.05
19	64.8	0.60	-0.65	-0.05
20	68.4	0.60	-0.69	-0.09
21	72.0	0.61	-0.73	-0.12
22	75.6	0.64	-0.76	-0.12
23	79.2	0.62	-0.80	-0.18
24	82.8	0.60	-0.83	-0.23
25	86.4	0.60	-0.87	-0.27
26	90.0	0.60	-0.91	-0.31
27	93.6	0.60	-0.94	-0.34
28	97.2	0.60	-0.98	-0.38
29	100.8	0.60	-1.02	-0.42
30	104.4	0.60	-1.05	-0.45
31	108.0	0.63	-1.09	-0.46
32	111.6	0.68	-1.12	-0.44
33	115.2	0.70	-1.16	-0.46
34	118.8	0.72	-1.20	-0.48
35	122.4	0.74	-1.23	-0.49
36	126.0	0.73	-1.27	-0.54
37	129.6	0.70	-1.31	-0.61
38	133.2	0.62	-1.34	-0.72
39	136.8	0.52	-1.38	-0.86
40	140.4	0.45	-1.41	-0.96
41	144.0	0.35	-1.45	-1.10
42	147.6	0.24	-1.49	-1.25
43	151.2	0.13	-1.52	-1.39
44	154.8	0.00	-1.56	-1.56

2160+00, MSU St. 20

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.03	-0.04	-0.01
3	7.2	0.06	-0.09	-0.03
4	10.8	0.07	-0.13	-0.06
5	14.4	0.09	-0.17	-0.08
6	18.0	0.10	-0.22	-0.12
7	21.6	0.10	-0.26	-0.16
8	25.2	0.11	-0.30	-0.19
9	28.8	0.13	-0.35	-0.22
10	32.4	0.19	-0.39	-0.20
11	36.0	0.20	-0.43	-0.23
12	39.6	0.22	-0.48	-0.26
13	43.2	0.28	-0.52	-0.24
14	46.8	0.31	-0.56	-0.25
15	50.4	0.35	-0.61	-0.26
16	54.0	0.39	-0.65	-0.26
17	57.6	0.40	-0.69	-0.29
18	61.2	0.44	-0.74	-0.30
19	64.8	0.49	-0.78	-0.29
20	68.4	0.50	-0.82	-0.32
21	72.0	0.53	-0.87	-0.34
22	75.6	0.56	-0.91	-0.35
23	79.2	0.55	-0.95	-0.40
24	82.8	0.55	-0.99	-0.44
25	86.4	0.54	-1.04	-0.50
26	90.0	0.52	-1.08	-0.56
27	93.6	0.52	-1.12	-0.60
28	97.2	0.53	-1.17	-0.64
29	100.8	0.55	-1.21	-0.66
30	104.4	0.55	-1.25	-0.70
31	108.0	0.60	-1.30	-0.70
32	111.6	0.60	-1.34	-0.74
33	115.2	0.60	-1.38	-0.78
34	118.8	0.60	-1.43	-0.83
35	122.4	0.60	-1.47	-0.87
36	126.0	0.61	-1.51	-0.90
37	129.6	0.61	-1.56	-0.95
38	133.2	0.60	-1.60	-1.00
39	136.8	0.55	-1.64	-1.09
40	140.4	0.42	-1.69	-1.27
41	144.0	0.32	-1.73	-1.41
42	147.6	0.20	-1.77	-1.57
43	151.2	0.10	-1.82	-1.72
44	154.8	-0.03	-1.86	-1.89

Table 11WD. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Driving Lane.

2154+00, MSU St. 21

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.05	-0.03	0.02
3	7.2	0.10	-0.06	0.04
4	10.8	0.13	-0.09	0.04
5	14.4	0.12	-0.12	-0.00
6	18.0	0.13	-0.15	-0.02
7	21.6	0.15	-0.18	-0.03
8	25.2	0.15	-0.21	-0.06
9	28.8	0.18	-0.25	-0.07
10	32.4	0.23	-0.28	-0.05
11	36.0	0.24	-0.31	-0.07
12	39.6	0.28	-0.34	-0.06
13	43.2	0.32	-0.37	-0.05
14	46.8	0.35	-0.40	-0.05
15	50.4	0.37	-0.43	-0.06
16	54.0	0.41	-0.46	-0.05
17	57.6	0.44	-0.49	-0.05
18	61.2	0.45	-0.52	-0.07
19	64.8	0.48	-0.55	-0.07
20	68.4	0.50	-0.58	-0.08
21	72.0	0.53	-0.61	-0.08
22	75.6	0.55	-0.64	-0.09
23	79.2	0.55	-0.68	-0.13
24	82.8	0.55	-0.71	-0.16
25	86.4	0.52	-0.74	-0.22
26	90.0	0.50	-0.77	-0.27
27	93.6	0.48	-0.80	-0.32
28	97.2	0.48	-0.83	-0.35
29	100.8	0.49	-0.86	-0.37
30	104.4	0.49	-0.89	-0.40
31	108.0	0.50	-0.92	-0.42
32	111.6	0.53	-0.95	-0.42
33	115.2	0.54	-0.98	-0.44
34	118.8	0.55	-1.01	-0.46
35	122.4	0.55	-1.04	-0.49
36	126.0	0.57	-1.07	-0.50
37	129.6	0.58	-1.11	-0.53
38	133.2	0.60	-1.14	-0.54
39	136.8	0.55	-1.17	-0.62
40	140.4	0.43	-1.20	-0.77
41	144.0	0.31	-1.23	-0.92
42	147.6	0.18	-1.26	-1.08
43	151.2	0.06	-1.29	-1.23
44	154.8	-0.01	-1.32	-1.33

2150+00, MSU St. 22

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.07	-0.03	0.04
3	7.2	0.09	-0.07	0.02
4	10.8	0.10	-0.10	-0.00
5	14.4	0.10	-0.13	-0.03
6	18.0	0.11	-0.17	-0.06
7	21.6	0.14	-0.20	-0.06
8	25.2	0.18	-0.23	-0.05
9	28.8	0.20	-0.27	-0.07
10	32.4	0.25	-0.30	-0.05
11	36.0	0.28	-0.33	-0.05
12	39.6	0.29	-0.37	-0.08
13	43.2	0.35	-0.40	-0.05
14	46.8	0.39	-0.44	-0.05
15	50.4	0.41	-0.47	-0.06
16	54.0	0.44	-0.50	-0.06
17	57.6	0.48	-0.54	-0.06
18	61.2	0.50	-0.57	-0.07
19	64.8	0.53	-0.60	-0.07
20	68.4	0.55	-0.64	-0.09
21	72.0	0.58	-0.67	-0.09
22	75.6	0.60	-0.70	-0.10
23	79.2	0.59	-0.74	-0.15
24	82.8	0.60	-0.77	-0.17
25	86.4	0.59	-0.80	-0.21
26	90.0	0.58	-0.84	-0.26
27	93.6	0.57	-0.87	-0.30
28	97.2	0.57	-0.90	-0.33
29	100.8	0.56	-0.94	-0.38
30	104.4	0.58	-0.97	-0.39
31	108.0	0.59	-1.00	-0.41
32	111.6	0.59	-1.04	-0.45
33	115.2	0.60	-1.07	-0.47
34	118.8	0.62	-1.11	-0.49
35	122.4	0.63	-1.14	-0.51
36	126.0	0.63	-1.17	-0.54
37	129.6	0.64	-1.21	-0.57
38	133.2	0.66	-1.24	-0.58
39	136.8	0.60	-1.27	-0.67
40	140.4	0.49	-1.31	-0.82
41	144.0	0.38	-1.34	-0.96
42	147.6	0.25	-1.37	-1.12
43	151.2	0.14	-1.41	-1.27
44	154.8	0.02	-1.44	-1.42

Table 12WD. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Driving Lane.

2144+00, MSU St. 23

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.03	-0.01	0.02
3	7.2	0.07	-0.02	0.05
4	10.8	0.09	-0.03	0.06
5	14.4	0.12	-0.04	0.08
6	18.0	0.16	-0.06	0.10
7	21.6	0.18	-0.07	0.11
8	25.2	0.15	-0.08	0.07
9	28.8	0.14	-0.09	0.05
10	32.4	0.16	-0.10	0.06
11	36.0	0.17	-0.11	0.06
12	39.6	0.19	-0.12	0.07
13	43.2	0.20	-0.13	0.07
14	46.8	0.20	-0.15	0.05
15	50.4	0.22	-0.16	0.06
16	54.0	0.25	-0.17	0.08
17	57.6	0.27	-0.18	0.09
18	61.2	0.30	-0.19	0.11
19	64.8	0.31	-0.20	0.11
20	68.4	0.32	-0.21	0.11
21	72.0	0.36	-0.22	0.14
22	75.6	0.39	-0.23	0.16
23	79.2	0.39	-0.25	0.14
24	82.8	0.40	-0.26	0.14
25	86.4	0.40	-0.27	0.13
26	90.0	0.40	-0.28	0.12
27	93.6	0.39	-0.29	0.10
28	97.2	0.37	-0.30	0.07
29	100.8	0.34	-0.31	0.03
30	104.4	0.30	-0.32	-0.02
31	108.0	0.29	-0.33	-0.04
32	111.6	0.28	-0.35	-0.07
33	115.2	0.25	-0.36	-0.11
34	118.8	0.21	-0.37	-0.16
35	122.4	0.21	-0.38	-0.17
36	126.0	0.20	-0.39	-0.19
37	129.6	0.21	-0.40	-0.19
38	133.2	0.21	-0.41	-0.20
39	136.8	0.21	-0.42	-0.21
40	140.4	0.20	-0.44	-0.24
41	144.0	0.19	-0.45	-0.26
42	147.6	0.20	-0.46	-0.26
43	151.2	0.17	-0.47	-0.30
44	154.8	0.00	-0.48	-0.48

2138+00, MSU St. 24

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.07	-0.02	0.05
3	7.2	0.10	-0.04	0.06
4	10.8	0.11	-0.05	0.06
5	14.4	0.10	-0.07	0.03
6	18.0	0.09	-0.09	-0.00
7	21.6	0.12	-0.11	0.01
8	25.2	0.14	-0.13	0.01
9	28.8	0.17	-0.15	0.02
10	32.4	0.19	-0.16	0.03
11	36.0	0.20	-0.18	0.02
12	39.6	0.25	-0.20	0.05
13	43.2	0.28	-0.22	0.06
14	46.8	0.31	-0.24	0.07
15	50.4	0.36	-0.25	0.11
16	54.0	0.39	-0.27	0.12
17	57.6	0.39	-0.29	0.10
18	61.2	0.42	-0.31	0.11
19	64.8	0.46	-0.33	0.13
20	68.4	0.48	-0.34	0.14
21	72.0	0.49	-0.36	0.13
22	75.6	0.51	-0.38	0.13
23	79.2	0.53	-0.40	0.13
24	82.8	0.51	-0.42	0.09
25	86.4	0.50	-0.44	0.06
26	90.0	0.49	-0.45	0.04
27	93.6	0.46	-0.47	-0.01
28	97.2	0.47	-0.49	-0.02
29	100.8	0.44	-0.51	-0.07
30	104.4	0.42	-0.53	-0.11
31	108.0	0.42	-0.54	-0.12
32	111.6	0.41	-0.56	-0.15
33	115.2	0.43	-0.58	-0.15
34	118.8	0.45	-0.60	-0.15
35	122.4	0.46	-0.62	-0.16
36	126.0	0.42	-0.63	-0.21
37	129.6	0.43	-0.65	-0.22
38	133.2	0.41	-0.67	-0.26
39	136.8	0.40	-0.69	-0.29
40	140.4	0.39	-0.71	-0.32
41	144.0	0.30	-0.73	-0.43
42	147.6	0.24	-0.74	-0.50
43	151.2	0.22	-0.76	-0.54
44	154.8	0.00	-0.78	-0.78

Table 13WD. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Driving Lane.

2134+00, MSU St. 25

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.05	-0.03	0.02
3	7.2	0.11	-0.06	0.05
4	10.8	0.13	-0.09	0.04
5	14.4	0.13	-0.12	0.01
6	18.0	0.13	-0.15	-0.02
7	21.6	0.14	-0.18	-0.04
8	25.2	0.15	-0.21	-0.06
9	28.8	0.17	-0.25	-0.08
10	32.4	0.19	-0.28	-0.09
11	36.0	0.22	-0.31	-0.09
12	39.6	0.25	-0.34	-0.09
13	43.2	0.29	-0.37	-0.08
14	46.8	0.32	-0.40	-0.08
15	50.4	0.35	-0.43	-0.08
16	54.0	0.39	-0.46	-0.07
17	57.6	0.42	-0.49	-0.07
18	61.2	0.45	-0.52	-0.07
19	64.8	0.46	-0.55	-0.09
20	68.4	0.47	-0.58	-0.11
21	72.0	0.51	-0.61	-0.10
22	75.6	0.53	-0.64	-0.11
23	79.2	0.55	-0.68	-0.13
24	82.8	0.55	-0.71	-0.16
25	86.4	0.55	-0.74	-0.19
26	90.0	0.54	-0.77	-0.23
27	93.6	0.52	-0.80	-0.28
28	97.2	0.53	-0.83	-0.30
29	100.8	0.51	-0.86	-0.35
30	104.4	0.52	-0.89	-0.37
31	108.0	0.53	-0.92	-0.39
32	111.6	0.54	-0.95	-0.41
33	115.2	0.54	-0.98	-0.44
34	118.8	0.54	-1.01	-0.47
35	122.4	0.55	-1.04	-0.49
36	126.0	0.56	-1.07	-0.51
37	129.6	0.56	-1.11	-0.55
38	133.2	0.56	-1.14	-0.58
39	136.8	0.56	-1.17	-0.61
40	140.4	0.56	-1.20	-0.64
41	144.0	0.45	-1.23	-0.78
42	147.6	0.32	-1.26	-0.94
43	151.2	0.19	-1.29	-1.10
44	154.8	0.06	-1.32	-1.26

2130+00, MSU St. 26

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.06	-0.03	0.03
3	7.2	0.10	-0.06	0.04
4	10.8	0.10	-0.09	0.01
5	14.4	0.10	-0.12	-0.02
6	18.0	0.11	-0.15	-0.04
7	21.6	0.14	-0.18	-0.04
8	25.2	0.15	-0.21	-0.06
9	28.8	0.20	-0.23	-0.03
10	32.4	0.21	-0.26	-0.05
11	36.0	0.22	-0.29	-0.07
12	39.6	0.28	-0.32	-0.04
13	43.2	0.31	-0.35	-0.04
14	46.8	0.34	-0.38	-0.04
15	50.4	0.39	-0.41	-0.02
16	54.0	0.41	-0.44	-0.03
17	57.6	0.46	-0.47	-0.01
18	61.2	0.49	-0.50	-0.01
19	64.8	0.50	-0.53	-0.03
20	68.4	0.52	-0.56	-0.04
21	72.0	0.57	-0.59	-0.02
22	75.6	0.60	-0.62	-0.02
23	79.2	0.60	-0.64	-0.04
24	82.8	0.59	-0.67	-0.08
25	86.4	0.59	-0.70	-0.11
26	90.0	0.56	-0.73	-0.17
27	93.6	0.53	-0.76	-0.23
28	97.2	0.52	-0.79	-0.27
29	100.8	0.51	-0.82	-0.31
30	104.4	0.50	-0.85	-0.35
31	108.0	0.50	-0.88	-0.38
32	111.6	0.50	-0.91	-0.41
33	115.2	0.50	-0.94	-0.44
34	118.8	0.50	-0.97	-0.47
35	122.4	0.50	-1.00	-0.50
36	126.0	0.51	-1.03	-0.52
37	129.6	0.51	-1.05	-0.54
38	133.2	0.51	-1.08	-0.57
39	136.8	0.51	-1.11	-0.60
40	140.4	0.50	-1.14	-0.64
41	144.0	0.40	-1.17	-0.77
42	147.6	0.30	-1.20	-0.90
43	151.2	0.24	-1.23	-0.99
44	154.8	0.14	-1.26	-1.12

Table 1WP. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Passing Lane.

2260+00, MSU St. 1

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.00	-0.05	-0.05
3	7.2	0.00	-0.10	-0.10
4	10.8	0.04	-0.15	-0.11
5	14.4	0.03	-0.20	-0.17
6	18.0	0.04	-0.25	-0.21
7	21.6	0.05	-0.30	-0.25
8	25.2	0.05	-0.35	-0.30
9	28.8	0.05	-0.40	-0.35
10	32.4	0.07	-0.45	-0.38
11	36.0	0.07	-0.50	-0.43
12	39.6	0.08	-0.55	-0.47
13	43.2	0.08	-0.60	-0.52
14	46.8	0.08	-0.65	-0.57
15	50.4	0.09	-0.70	-0.61
16	54.0	0.10	-0.75	-0.65
17	57.6	0.09	-0.80	-0.71
18	61.2	0.13	-0.85	-0.72
19	64.8	0.14	-0.90	-0.76
20	68.4	0.15	-0.95	-0.80
21	72.0	0.17	-1.00	-0.83
22	75.6	0.18	-1.05	-0.87
23	79.2	0.18	-1.11	-0.93
24	82.8	0.19	-1.16	-0.97
25	86.4	0.19	-1.21	-1.02
26	90.0	0.19	-1.26	-1.07
27	93.6	0.20	-1.31	-1.11
28	97.2	0.20	-1.36	-1.16
29	100.8	0.22	-1.41	-1.19
30	104.4	0.23	-1.46	-1.23
31	108.0	0.26	-1.51	-1.25
32	111.6	0.28	-1.56	-1.28
33	115.2	0.28	-1.61	-1.33
34	118.8	0.29	-1.66	-1.37
35	122.4	0.29	-1.71	-1.42
36	126.0	0.30	-1.76	-1.46
37	129.6	0.30	-1.81	-1.51
38	133.2	0.26	-1.86	-1.60
39	136.8	0.19	-1.91	-1.72
40	140.4	0.19	-1.96	-1.77
41	144.0	0.16	-2.01	-1.85
42	147.6	0.11	-2.06	-1.95
43	151.2	0.09	-2.11	-2.02
44	154.8	0.08	-2.16	-2.08

2254+00, MSU St. 2

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.00	-0.05	-0.05
3	7.2	0.00	-0.10	-0.10
4	10.8	0.00	-0.15	-0.15
5	14.4	0.00	-0.20	-0.20
6	18.0	0.02	-0.25	-0.23
7	21.6	0.02	-0.30	-0.28
8	25.2	0.03	-0.35	-0.32
9	28.8	0.03	-0.40	-0.37
10	32.4	0.02	-0.45	-0.43
11	36.0	0.02	-0.50	-0.48
12	39.6	0.07	-0.55	-0.48
13	43.2	0.08	-0.60	-0.52
14	46.8	0.08	-0.65	-0.57
15	50.4	0.10	-0.70	-0.60
16	54.0	0.10	-0.75	-0.65
17	57.6	0.10	-0.80	-0.70
18	61.2	0.11	-0.85	-0.74
19	64.8	0.15	-0.90	-0.75
20	68.4	0.15	-0.95	-0.80
21	72.0	0.17	-1.00	-0.83
22	75.6	0.19	-1.05	-0.86
23	79.2	0.18	-1.11	-0.93
24	82.8	0.02	-1.16	-1.14
25	86.4	0.21	-1.21	-1.00
26	90.0	0.20	-1.26	-1.06
27	93.6	0.20	-1.31	-1.11
28	97.2	0.20	-1.36	-1.16
29	100.8	0.20	-1.41	-1.21
30	104.4	0.18	-1.46	-1.28
31	108.0	0.18	-1.51	-1.33
32	111.6	0.17	-1.56	-1.39
33	115.2	0.15	-1.61	-1.46
34	118.8	0.17	-1.66	-1.49
35	122.4	0.18	-1.71	-1.53
36	126.0	0.19	-1.76	-1.57
37	129.6	0.20	-1.81	-1.61
38	133.2	0.16	-1.86	-1.70
39	136.8	0.13	-1.91	-1.78
40	140.4	0.10	-1.96	-1.86
41	144.0	0.10	-2.01	-1.91
42	147.6	0.08	-2.06	-1.98
43	151.2	0.08	-2.11	-2.03
44	154.8	0.04	-2.16	-2.12

Table 2WP. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Passing Lane.

2250+00, MSU St. 3

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	-0.01	-0.05	-0.06
3	7.2	-0.01	-0.10	-0.11
4	10.8	-0.01	-0.15	-0.16
5	14.4	-0.01	-0.20	-0.21
6	18.0	0.00	-0.24	-0.24
7	21.6	0.01	-0.29	-0.28
8	25.2	0.00	-0.34	-0.34
9	28.8	0.01	-0.39	-0.38
10	32.4	0.03	-0.44	-0.41
11	36.0	0.02	-0.49	-0.47
12	39.6	0.04	-0.54	-0.50
13	43.2	0.05	-0.59	-0.54
14	46.8	0.04	-0.63	-0.59
15	50.4	0.07	-0.68	-0.61
16	54.0	0.08	-0.73	-0.65
17	57.6	0.07	-0.78	-0.71
18	61.2	0.09	-0.83	-0.74
19	64.8	0.11	-0.88	-0.77
20	68.4	0.10	-0.93	-0.83
21	72.0	0.13	-0.98	-0.85
22	75.6	0.16	-1.03	-0.87
23	79.2	0.17	-1.07	-0.90
24	82.8	0.18	-1.12	-0.94
25	86.4	0.19	-1.17	-0.98
26	90.0	0.19	-1.22	-1.03
27	93.6	0.18	-1.27	-1.09
28	97.2	0.18	-1.32	-1.14
29	100.8	0.15	-1.37	-1.22
30	104.4	0.12	-1.42	-1.30
31	108.0	0.11	-1.47	-1.36
32	111.6	0.11	-1.51	-1.40
33	115.2	0.11	-1.56	-1.45
34	118.8	0.11	-1.61	-1.50
35	122.4	0.11	-1.66	-1.55
36	126.0	0.11	-1.71	-1.60
37	129.6	0.14	-1.76	-1.62
38	133.2	0.10	-1.81	-1.71
39	136.8	0.09	-1.86	-1.77
40	140.4	0.08	-1.90	-1.82
41	144.0	0.05	-1.95	-1.90
42	147.6	0.01	-2.00	-1.99
43	151.2	-0.01	-2.05	-2.06
44	154.8	-0.03	-2.10	-2.13

2244+00, MSU St. 4

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.00	-0.04	-0.04
3	7.2	0.01	-0.09	-0.08
4	10.8	0.00	-0.13	-0.13
5	14.4	0.00	-0.18	-0.18
6	18.0	0.02	-0.22	-0.20
7	21.6	0.03	-0.27	-0.24
8	25.2	0.04	-0.31	-0.27
9	28.8	0.03	-0.36	-0.33
10	32.4	0.04	-0.40	-0.36
11	36.0	0.02	-0.45	-0.43
12	39.6	0.03	-0.49	-0.46
13	43.2	0.02	-0.54	-0.52
14	46.8	0.04	-0.58	-0.54
15	50.4	0.06	-0.63	-0.57
16	54.0	0.09	-0.67	-0.58
17	57.6	0.09	-0.71	-0.62
18	61.2	0.10	-0.76	-0.66
19	64.8	0.11	-0.80	-0.69
20	68.4	0.10	-0.85	-0.75
21	72.0	0.11	-0.89	-0.78
22	75.6	0.12	-0.94	-0.82
23	79.2	0.12	-0.98	-0.86
24	82.8	0.12	-1.03	-0.91
25	86.4	0.13	-1.07	-0.94
26	90.0	0.14	-1.12	-0.98
27	93.6	0.12	-1.16	-1.04
28	97.2	0.14	-1.21	-1.07
29	100.8	0.12	-1.25	-1.13
30	104.4	0.11	-1.29	-1.18
31	108.0	0.10	-1.34	-1.24
32	111.6	0.10	-1.38	-1.28
33	115.2	0.09	-1.43	-1.34
34	118.8	0.09	-1.47	-1.38
35	122.4	0.09	-1.52	-1.43
36	126.0	0.08	-1.56	-1.48
37	129.6	0.10	-1.61	-1.51
38	133.2	0.11	-1.65	-1.54
39	136.8	0.09	-1.70	-1.61
40	140.4	0.04	-1.74	-1.70
41	144.0	0.01	-1.79	-1.78
42	147.6	-0.01	-1.83	-1.84
43	151.2	-0.03	-1.88	-1.91
44	154.8	-0.05	-1.92	-1.97

Table 3WP. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Passing Lane.

2238+00, MSU St. 5

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.00	-0.05	-0.05
3	7.2	0.00	-0.09	-0.09
4	10.8	0.01	-0.14	-0.13
5	14.4	0.01	-0.18	-0.17
6	18.0	0.02	-0.23	-0.21
7	21.6	0.02	-0.28	-0.26
8	25.2	0.02	-0.32	-0.30
9	28.8	0.04	-0.37	-0.33
10	32.4	0.04	-0.41	-0.37
11	36.0	0.02	-0.46	-0.44
12	39.6	0.05	-0.51	-0.46
13	43.2	0.06	-0.55	-0.49
14	46.8	0.02	-0.60	-0.58
15	50.4	0.01	-0.64	-0.63
16	54.0	0.03	-0.69	-0.66
17	57.6	0.01	-0.74	-0.73
18	61.2	0.01	-0.78	-0.77
19	64.8	0.01	-0.83	-0.82
20	68.4	0.00	-0.87	-0.87
21	72.0	0.00	-0.92	-0.92
22	75.6	0.01	-0.97	-0.96
23	79.2	0.00	-1.01	-1.01
24	82.8	-0.01	-1.06	-1.07
25	86.4	-0.01	-1.11	-1.12
26	90.0	-0.04	-1.15	-1.19
27	93.6	-0.04	-1.20	-1.24
28	97.2	-0.04	-1.24	-1.28
29	100.8	-0.05	-1.29	-1.34
30	104.4	-0.06	-1.34	-1.40
31	108.0	-0.08	-1.38	-1.46
32	111.6	-0.09	-1.43	-1.52
33	115.2	-0.09	-1.47	-1.56
34	118.8	-0.10	-1.52	-1.62
35	122.4	-0.10	-1.57	-1.67
36	126.0	-0.10	-1.61	-1.71
37	129.6	-0.09	-1.66	-1.75
38	133.2	-0.10	-1.70	-1.80
39	136.8	-0.11	-1.75	-1.86
40	140.4	-0.15	-1.80	-1.95
41	144.0	-0.19	-1.84	-2.03
42	147.6	-0.21	-1.89	-2.10
43	151.2	-0.25	-1.93	-2.18
44	154.8	-0.30	-1.98	-2.28

2232+00, MSU St. 6

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.00	-0.05	-0.05
3	7.2	0.00	-0.10	-0.10
4	10.8	0.00	-0.15	-0.15
5	14.4	0.00	-0.20	-0.20
6	18.0	0.00	-0.24	-0.24
7	21.6	0.01	-0.29	-0.28
8	25.2	0.01	-0.34	-0.33
9	28.8	0.00	-0.39	-0.39
10	32.4	0.00	-0.44	-0.44
11	36.0	0.00	-0.49	-0.49
12	39.6	0.00	-0.54	-0.54
13	43.2	0.00	-0.59	-0.59
14	46.8	0.00	-0.63	-0.63
15	50.4	0.01	-0.68	-0.67
16	54.0	0.02	-0.73	-0.71
17	57.6	0.02	-0.78	-0.76
18	61.2	0.03	-0.83	-0.80
19	64.8	0.05	-0.88	-0.83
20	68.4	0.08	-0.93	-0.85
21	72.0	0.09	-0.98	-0.89
22	75.6	0.09	-1.03	-0.94
23	79.2	0.09	-1.07	-0.98
24	82.8	0.10	-1.12	-1.02
25	86.4	0.10	-1.17	-1.07
26	90.0	0.10	-1.22	-1.12
27	93.6	0.10	-1.27	-1.17
28	97.2	0.10	-1.32	-1.22
29	100.8	0.09	-1.37	-1.28
30	104.4	0.05	-1.42	-1.37
31	108.0	0.05	-1.47	-1.42
32	111.6	0.03	-1.51	-1.48
33	115.2	0.01	-1.56	-1.55
34	118.8	0.01	-1.61	-1.60
35	122.4	0.01	-1.66	-1.65
36	126.0	0.01	-1.71	-1.70
37	129.6	0.01	-1.76	-1.75
38	133.2	0.01	-1.81	-1.80
39	136.8	0.01	-1.86	-1.85
40	140.4	-0.01	-1.90	-1.91
41	144.0	-0.07	-1.95	-2.02
42	147.6	-0.11	-2.00	-2.11
43	151.2	-0.18	-2.05	-2.23
44	154.8	-0.20	-2.10	-2.30

Table 4WP. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Passing Lane.

2226+00, MSU St. 7

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.00	-0.05	-0.05
3	7.2	-0.01	-0.10	-0.11
4	10.8	-0.01	-0.15	-0.16
5	14.4	-0.01	-0.20	-0.21
6	18.0	0.00	-0.24	-0.24
7	21.6	0.00	-0.29	-0.29
8	25.2	0.00	-0.34	-0.34
9	28.8	0.01	-0.39	-0.38
10	32.4	0.01	-0.44	-0.43
11	36.0	0.00	-0.49	-0.49
12	39.6	0.01	-0.54	-0.53
13	43.2	0.01	-0.59	-0.58
14	46.8	0.02	-0.63	-0.61
15	50.4	0.06	-0.68	-0.62
16	54.0	0.09	-0.73	-0.64
17	57.6	0.08	-0.78	-0.70
18	61.2	0.09	-0.83	-0.74
19	64.8	0.10	-0.88	-0.78
20	68.4	0.10	-0.93	-0.83
21	72.0	0.11	-0.98	-0.87
22	75.6	0.13	-1.03	-0.90
23	79.2	0.14	-1.07	-0.93
24	82.8	0.16	-1.12	-0.96
25	86.4	0.19	-1.17	-0.98
26	90.0	0.20	-1.22	-1.02
27	93.6	0.21	-1.27	-1.06
28	97.2	0.22	-1.32	-1.10
29	100.8	0.23	-1.37	-1.14
30	104.4	0.22	-1.42	-1.20
31	108.0	0.22	-1.47	-1.25
32	111.6	0.22	-1.51	-1.29
33	115.2	0.21	-1.56	-1.35
34	118.8	0.20	-1.61	-1.41
35	122.4	0.20	-1.66	-1.46
36	126.0	0.21	-1.71	-1.50
37	129.6	0.22	-1.76	-1.54
38	133.2	0.22	-1.81	-1.59
39	136.8	0.22	-1.86	-1.64
40	140.4	0.20	-1.90	-1.70
41	144.0	0.16	-1.95	-1.79
42	147.6	0.11	-2.00	-1.89
43	151.2	0.10	-2.05	-1.95
44	154.8	0.09	-2.10	-2.01

2220+00, MSU St. 8

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.00	-0.05	-0.05
3	7.2	-0.01	-0.10	-0.11
4	10.8	-0.01	-0.15	-0.16
5	14.4	0.00	-0.20	-0.20
6	18.0	0.00	-0.25	-0.25
7	21.6	0.02	-0.30	-0.28
8	25.2	0.04	-0.35	-0.31
9	28.8	0.08	-0.40	-0.32
10	32.4	0.07	-0.45	-0.38
11	36.0	0.06	-0.50	-0.44
12	39.6	0.07	-0.55	-0.48
13	43.2	0.08	-0.60	-0.52
14	46.8	0.08	-0.65	-0.57
15	50.4	0.09	-0.70	-0.61
16	54.0	0.09	-0.75	-0.66
17	57.6	0.10	-0.80	-0.70
18	61.2	0.11	-0.85	-0.74
19	64.8	0.15	-0.90	-0.75
20	68.4	0.19	-0.95	-0.76
21	72.0	0.19	-1.00	-0.81
22	75.6	0.19	-1.05	-0.86
23	79.2	0.19	-1.11	-0.92
24	82.8	0.20	-1.16	-0.96
25	86.4	0.23	-1.21	-0.98
26	90.0	0.22	-1.26	-1.04
27	93.6	0.23	-1.31	-1.08
28	97.2	0.25	-1.36	-1.11
29	100.8	0.24	-1.41	-1.17
30	104.4	0.21	-1.46	-1.25
31	108.0	0.20	-1.51	-1.31
32	111.6	0.20	-1.56	-1.36
33	115.2	0.19	-1.61	-1.42
34	118.8	0.19	-1.66	-1.47
35	122.4	0.19	-1.71	-1.52
36	126.0	0.20	-1.76	-1.56
37	129.6	0.21	-1.81	-1.60
38	133.2	0.21	-1.86	-1.65
39	136.8	0.21	-1.91	-1.70
40	140.4	0.20	-1.96	-1.76
41	144.0	0.19	-2.01	-1.82
42	147.6	0.14	-2.06	-1.92
43	151.2	0.12	-2.11	-1.99
44	154.8	0.10	-2.16	-2.06

Table 5WP. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Passing Lane.

2214+00, MSU St. 9

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.01	-0.05	-0.04
3	7.2	0.00	-0.10	-0.10
4	10.8	0.01	-0.15	-0.14
5	14.4	0.03	-0.21	-0.18
6	18.0	0.06	-0.26	-0.20
7	21.6	0.07	-0.31	-0.24
8	25.2	0.08	-0.36	-0.28
9	28.8	0.09	-0.41	-0.32
10	32.4	0.09	-0.46	-0.37
11	36.0	0.08	-0.52	-0.44
12	39.6	0.10	-0.57	-0.47
13	43.2	0.10	-0.62	-0.52
14	46.8	0.10	-0.67	-0.57
15	50.4	0.11	-0.72	-0.61
16	54.0	0.12	-0.77	-0.65
17	57.6	0.13	-0.83	-0.70
18	61.2	0.15	-0.88	-0.73
19	64.8	0.16	-0.93	-0.77
20	68.4	0.18	-0.98	-0.80
21	72.0	0.20	-1.03	-0.83
22	75.6	0.20	-1.08	-0.88
23	79.2	0.20	-1.14	-0.94
24	82.8	0.20	-1.19	-0.99
25	86.4	0.21	-1.24	-1.03
26	90.0	0.21	-1.29	-1.08
27	93.6	0.21	-1.34	-1.13
28	97.2	0.21	-1.39	-1.18
29	100.8	0.20	-1.45	-1.25
30	104.4	0.20	-1.50	-1.30
31	108.0	0.20	-1.55	-1.35
32	111.6	0.19	-1.60	-1.41
33	115.2	0.20	-1.65	-1.45
34	118.8	0.20	-1.70	-1.50
35	122.4	0.19	-1.76	-1.57
36	126.0	0.20	-1.81	-1.61
37	129.6	0.20	-1.86	-1.66
38	133.2	0.22	-1.91	-1.69
39	136.8	0.21	-1.96	-1.75
40	140.4	0.20	-2.01	-1.81
41	144.0	0.19	-2.07	-1.88
42	147.6	0.13	-2.12	-1.99
43	151.2	0.10	-2.17	-2.07
44	154.8	0.05	-2.22	-2.17

2208+00, MSU St. 10

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.00	-0.06	-0.06
3	7.2	0.00	-0.11	-0.11
4	10.8	-0.02	-0.17	-0.19
5	14.4	-0.03	-0.22	-0.25
6	18.0	-0.04	-0.28	-0.32
7	21.6	-0.07	-0.33	-0.40
8	25.2	-0.04	-0.39	-0.43
9	28.8	-0.02	-0.45	-0.47
10	32.4	-0.03	-0.50	-0.53
11	36.0	-0.01	-0.56	-0.57
12	39.6	-0.01	-0.61	-0.62
13	43.2	-0.02	-0.67	-0.69
14	46.8	-0.01	-0.73	-0.74
15	50.4	0.00	-0.78	-0.78
16	54.0	0.00	-0.84	-0.84
17	57.6	0.00	-0.89	-0.89
18	61.2	0.00	-0.95	-0.95
19	64.8	0.01	-1.00	-0.99
20	68.4	0.02	-1.06	-1.04
21	72.0	0.08	-1.12	-1.04
22	75.6	0.10	-1.17	-1.07
23	79.2	0.10	-1.23	-1.13
24	82.8	0.10	-1.28	-1.18
25	86.4	0.12	-1.34	-1.22
26	90.0	0.11	-1.40	-1.29
27	93.6	0.11	-1.45	-1.34
28	97.2	0.10	-1.51	-1.41
29	100.8	0.10	-1.56	-1.46
30	104.4	0.11	-1.62	-1.51
31	108.0	0.11	-1.67	-1.56
32	111.6	0.10	-1.73	-1.63
33	115.2	0.11	-1.79	-1.68
34	118.8	0.12	-1.84	-1.72
35	122.4	0.11	-1.90	-1.79
36	126.0	0.11	-1.95	-1.84
37	129.6	0.14	-2.01	-1.87
38	133.2	0.17	-2.07	-1.90
39	136.8	0.19	-2.12	-1.93
40	140.4	0.18	-2.18	-2.00
41	144.0	0.14	-2.23	-2.09
42	147.6	0.11	-2.29	-2.18
43	151.2	0.10	-2.34	-2.24
44	154.8	0.10	-2.40	-2.30

Table 6WP. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Passing Lane.

2200+00, MSU St. 11

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.00	-0.04	-0.04
3	7.2	0.00	-0.09	-0.09
4	10.8	-0.01	-0.13	-0.14
5	14.4	-0.02	-0.18	-0.20
6	18.0	-0.02	-0.22	-0.24
7	21.6	-0.01	-0.27	-0.28
8	25.2	0.01	-0.31	-0.30
9	28.8	0.03	-0.36	-0.33
10	32.4	0.05	-0.40	-0.35
11	36.0	0.05	-0.45	-0.40
12	39.6	0.04	-0.49	-0.45
13	43.2	0.05	-0.54	-0.49
14	46.8	0.06	-0.58	-0.52
15	50.4	0.07	-0.63	-0.56
16	54.0	0.07	-0.67	-0.60
17	57.6	0.06	-0.71	-0.65
18	61.2	0.08	-0.76	-0.68
19	64.8	0.09	-0.80	-0.71
20	68.4	0.12	-0.85	-0.73
21	72.0	0.12	-0.89	-0.77
22	75.6	0.15	-0.94	-0.79
23	79.2	0.15	-0.98	-0.83
24	82.8	0.14	-1.03	-0.89
25	86.4	0.13	-1.07	-0.94
26	90.0	0.10	-1.12	-1.02
27	93.6	0.13	-1.16	-1.03
28	97.2	0.15	-1.21	-1.06
29	100.8	0.10	-1.25	-1.15
30	104.4	0.10	-1.29	-1.19
31	108.0	0.10	-1.34	-1.24
32	111.6	0.09	-1.38	-1.29
33	115.2	0.07	-1.43	-1.36
34	118.8	0.07	-1.47	-1.40
35	122.4	0.07	-1.52	-1.45
36	126.0	0.06	-1.56	-1.50
37	129.6	0.07	-1.61	-1.54
38	133.2	0.08	-1.65	-1.57
39	136.8	0.09	-1.70	-1.61
40	140.4	0.07	-1.74	-1.67
41	144.0	0.07	-1.79	-1.72
42	147.6	0.07	-1.83	-1.76
43	151.2	0.05	-1.88	-1.83
44	154.8	-0.01	-1.92	-1.93

2196+00, MSU St. 12

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.00	-0.05	-0.05
3	7.2	0.00	-0.09	-0.09
4	10.8	0.00	-0.14	-0.14
5	14.4	0.03	-0.19	-0.16
6	18.0	0.04	-0.24	-0.20
7	21.6	0.04	-0.28	-0.24
8	25.2	0.06	-0.33	-0.27
9	28.8	0.05	-0.38	-0.33
10	32.4	0.04	-0.43	-0.39
11	36.0	0.04	-0.47	-0.43
12	39.6	0.07	-0.52	-0.45
13	43.2	0.08	-0.57	-0.49
14	46.8	0.08	-0.62	-0.54
15	50.4	0.08	-0.66	-0.58
16	54.0	0.12	-0.71	-0.59
17	57.6	0.14	-0.76	-0.62
18	61.2	0.16	-0.81	-0.65
19	64.8	0.18	-0.85	-0.67
20	68.4	0.20	-0.90	-0.70
21	72.0	0.23	-0.95	-0.72
22	75.6	0.23	-1.00	-0.77
23	79.2	0.23	-1.04	-0.81
24	82.8	0.22	-1.09	-0.87
25	86.4	0.26	-1.14	-0.88
26	90.0	0.21	-1.19	-0.98
27	93.6	0.20	-1.23	-1.03
28	97.2	0.19	-1.28	-1.09
29	100.8	0.18	-1.33	-1.15
30	104.4	0.18	-1.38	-1.20
31	108.0	0.18	-1.42	-1.24
32	111.6	0.18	-1.47	-1.29
33	115.2	0.18	-1.52	-1.34
34	118.8	0.18	-1.57	-1.39
35	122.4	0.18	-1.61	-1.43
36	126.0	0.19	-1.66	-1.47
37	129.6	0.20	-1.71	-1.51
38	133.2	0.26	-1.76	-1.50
39	136.8	0.19	-1.80	-1.61
40	140.4	0.18	-1.85	-1.67
41	144.0	0.18	-1.90	-1.72
42	147.6	0.15	-1.95	-1.80
43	151.2	0.10	-1.99	-1.89
44	154.8	0.08	-2.04	-1.96

Table 7WP. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Passing Lane.

2192+00, MSU St. 13

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	-0.04	-0.05	-0.09
3	7.2	-0.05	-0.10	-0.15
4	10.8	-0.03	-0.15	-0.18
5	14.4	-0.04	-0.20	-0.24
6	18.0	-0.03	-0.24	-0.27
7	21.6	0.04	-0.29	-0.25
8	25.2	0.03	-0.34	-0.31
9	28.8	0.03	-0.39	-0.36
10	32.4	0.04	-0.44	-0.40
11	36.0	0.05	-0.49	-0.44
12	39.6	0.04	-0.54	-0.50
13	43.2	0.04	-0.59	-0.55
14	46.8	0.05	-0.63	-0.58
15	50.4	0.09	-0.68	-0.59
16	54.0	0.14	-0.73	-0.59
17	57.6	0.15	-0.78	-0.63
18	61.2	0.15	-0.83	-0.68
19	64.8	0.24	-0.88	-0.64
20	68.4	0.25	-0.93	-0.68
21	72.0	0.25	-0.98	-0.73
22	75.6	0.27	-1.03	-0.76
23	79.2	0.30	-1.07	-0.77
24	82.8	0.34	-1.12	-0.78
25	86.4	0.35	-1.17	-0.82
26	90.0	0.35	-1.22	-0.87
27	93.6	0.35	-1.27	-0.92
28	97.2	0.35	-1.32	-0.97
29	100.8	0.34	-1.37	-1.03
30	104.4	0.34	-1.42	-1.08
31	108.0	0.32	-1.47	-1.15
32	111.6	0.32	-1.51	-1.19
33	115.2	0.32	-1.56	-1.24
34	118.8	0.33	-1.61	-1.28
35	122.4	0.34	-1.66	-1.32
36	126.0	0.36	-1.71	-1.35
37	129.6	0.37	-1.76	-1.39
38	133.2	0.38	-1.81	-1.43
39	136.8	0.40	-1.86	-1.46
40	140.4	0.40	-1.90	-1.50
41	144.0	0.37	-1.95	-1.58
42	147.6	0.35	-2.00	-1.65
43	151.2	0.35	-2.05	-1.70
44	154.8	0.34	-2.10	-1.76

2188+00, MSU St. 14

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	-0.01	-0.05	-0.06
3	7.2	0.01	-0.09	-0.08
4	10.8	0.00	-0.14	-0.14
5	14.4	0.00	-0.18	-0.18
6	18.0	0.02	-0.23	-0.21
7	21.6	0.02	-0.28	-0.26
8	25.2	0.02	-0.32	-0.30
9	28.8	0.02	-0.37	-0.35
10	32.4	0.02	-0.41	-0.39
11	36.0	0.02	-0.46	-0.44
12	39.6	0.02	-0.51	-0.49
13	43.2	0.03	-0.55	-0.52
14	46.8	0.04	-0.60	-0.56
15	50.4	0.05	-0.64	-0.59
16	54.0	0.07	-0.69	-0.62
17	57.6	0.10	-0.74	-0.64
18	61.2	0.12	-0.78	-0.66
19	64.8	0.13	-0.83	-0.70
20	68.4	0.14	-0.87	-0.73
21	72.0	0.17	-0.92	-0.75
22	75.6	0.21	-0.97	-0.76
23	79.2	0.22	-1.01	-0.79
24	82.8	0.24	-1.06	-0.82
25	86.4	0.26	-1.11	-0.85
26	90.0	0.27	-1.15	-0.88
27	93.6	0.27	-1.20	-0.93
28	97.2	0.29	-1.24	-0.95
29	100.8	0.26	-1.29	-1.03
30	104.4	0.24	-1.34	-1.10
31	108.0	0.22	-1.38	-1.16
32	111.6	0.22	-1.43	-1.21
33	115.2	0.22	-1.47	-1.25
34	118.8	0.22	-1.52	-1.30
35	122.4	0.22	-1.57	-1.35
36	126.0	0.24	-1.61	-1.37
37	129.6	0.26	-1.66	-1.40
38	133.2	0.09	-1.70	-1.61
39	136.8	0.31	-1.75	-1.44
40	140.4	0.32	-1.80	-1.48
41	144.0	0.31	-1.84	-1.53
42	147.6	0.29	-1.89	-1.60
43	151.2	0.25	-1.93	-1.68
44	154.8	0.23	-1.98	-1.75

Table 8WP. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Passing Lane.

2184+00, MSU St. 15

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.02	-0.04	-0.02
3	7.2	0.01	-0.08	-0.07
4	10.8	0.00	-0.12	-0.12
5	14.4	0.02	-0.16	-0.14
6	18.0	0.00	-0.20	-0.20
7	21.6	0.02	-0.23	-0.21
8	25.2	0.02	-0.27	-0.25
9	28.8	0.01	-0.31	-0.30
10	32.4	0.01	-0.35	-0.34
11	36.0	0.00	-0.39	-0.39
12	39.6	0.00	-0.43	-0.43
13	43.2	0.01	-0.47	-0.46
14	46.8	0.00	-0.51	-0.51
15	50.4	0.02	-0.55	-0.53
16	54.0	0.03	-0.59	-0.56
17	57.6	0.04	-0.63	-0.59
18	61.2	0.06	-0.66	-0.60
19	64.8	0.09	-0.70	-0.61
20	68.4	0.09	-0.74	-0.65
21	72.0	0.10	-0.78	-0.68
22	75.6	0.10	-0.82	-0.72
23	79.2	0.10	-0.86	-0.76
24	82.8	0.10	-0.90	-0.80
25	86.4	0.10	-0.94	-0.84
26	90.0	0.10	-0.98	-0.88
27	93.6	0.09	-1.02	-0.93
28	97.2	0.08	-1.05	-0.97
29	100.8	0.08	-1.09	-1.01
30	104.4	0.03	-1.13	-1.10
31	108.0	0.03	-1.17	-1.14
32	111.6	0.00	-1.21	-1.21
33	115.2	0.00	-1.25	-1.25
34	118.8	-0.01	-1.29	-1.30
35	122.4	0.00	-1.33	-1.33
36	126.0	0.00	-1.37	-1.37
37	129.6	0.04	-1.41	-1.37
38	133.2	0.07	-1.45	-1.38
39	136.8	0.05	-1.48	-1.43
40	140.4	0.06	-1.52	-1.46
41	144.0	0.06	-1.56	-1.50
42	147.6	0.05	-1.60	-1.55
43	151.2	0.03	-1.64	-1.61
44	154.8	0.00	-1.68	-1.68

2180+00, MSU St. 16

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.02	-0.04	-0.02
3	7.2	0.04	-0.08	-0.04
4	10.8	0.04	-0.12	-0.08
5	14.4	0.00	-0.16	-0.16
6	18.0	0.02	-0.20	-0.18
7	21.6	0.05	-0.23	-0.18
8	25.2	0.04	-0.27	-0.23
9	28.8	0.02	-0.31	-0.29
10	32.4	0.05	-0.35	-0.30
11	36.0	0.03	-0.39	-0.36
12	39.6	0.02	-0.43	-0.41
13	43.2	0.04	-0.47	-0.43
14	46.8	0.03	-0.51	-0.48
15	50.4	0.03	-0.55	-0.52
16	54.0	0.06	-0.59	-0.53
17	57.6	0.04	-0.63	-0.59
18	61.2	0.07	-0.66	-0.59
19	64.8	0.10	-0.70	-0.60
20	68.4	0.10	-0.74	-0.64
21	72.0	0.10	-0.78	-0.68
22	75.6	0.11	-0.82	-0.71
23	79.2	0.10	-0.86	-0.76
24	82.8	0.12	-0.90	-0.78
25	86.4	0.10	-0.94	-0.84
26	90.0	0.12	-0.98	-0.86
27	93.6	0.10	-1.02	-0.92
28	97.2	0.10	-1.05	-0.95
29	100.8	0.08	-1.09	-1.01
30	104.4	0.07	-1.13	-1.06
31	108.0	0.05	-1.17	-1.12
32	111.6	0.02	-1.21	-1.19
33	115.2	0.00	-1.25	-1.25
34	118.8	0.01	-1.29	-1.28
35	122.4	0.00	-1.33	-1.33
36	126.0	0.00	-1.37	-1.37
37	129.6	0.00	-1.41	-1.41
38	133.2	0.01	-1.45	-1.44
39	136.8	0.02	-1.48	-1.46
40	140.4	0.07	-1.52	-1.45
41	144.0	0.09	-1.56	-1.47
42	147.6	0.00	-1.60	-1.60
43	151.2	0.00	-1.64	-1.64
44	154.8	0.00	-1.68	-1.68

Table 9WP. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Passing Lane.

2176+00, MSU St. 17

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.01	-0.03	-0.02
3	7.2	0.00	-0.06	-0.06
4	10.8	0.00	-0.09	-0.09
5	14.4	0.00	-0.12	-0.12
6	18.0	-0.02	-0.15	-0.17
7	21.6	-0.05	-0.18	-0.23
8	25.2	-0.02	-0.21	-0.23
9	28.8	0.00	-0.23	-0.23
10	32.4	-0.02	-0.26	-0.28
11	36.0	-0.05	-0.29	-0.34
12	39.6	-0.05	-0.32	-0.37
13	43.2	-0.08	-0.35	-0.43
14	46.8	-0.02	-0.38	-0.40
15	50.4	-0.02	-0.41	-0.43
16	54.0	0.00	-0.44	-0.44
17	57.6	0.00	-0.47	-0.47
18	61.2	0.03	-0.50	-0.47
19	64.8	0.02	-0.53	-0.51
20	68.4	0.03	-0.56	-0.53
21	72.0	0.04	-0.59	-0.55
22	75.6	0.02	-0.62	-0.60
23	79.2	0.05	-0.64	-0.59
24	82.8	0.04	-0.67	-0.63
25	86.4	0.02	-0.70	-0.68
26	90.0	0.01	-0.73	-0.72
27	93.6	0.00	-0.76	-0.76
28	97.2	0.00	-0.79	-0.79
29	100.8	-0.07	-0.82	-0.89
30	104.4	-0.10	-0.85	-0.95
31	108.0	-0.10	-0.88	-0.98
32	111.6	-0.11	-0.91	-1.02
33	115.2	-0.10	-0.94	-1.04
34	118.8	-0.10	-0.97	-1.07
35	122.4	-0.12	-1.00	-1.12
36	126.0	-0.10	-1.03	-1.13
37	129.6	-0.09	-1.05	-1.14
38	133.2	-0.09	-1.08	-1.17
39	136.8	-0.03	-1.11	-1.14
40	140.4	-0.10	-1.14	-1.24
41	144.0	-0.12	-1.17	-1.29
42	147.6	-0.15	-1.20	-1.35
43	151.2	-0.16	-1.23	-1.39
44	154.8	-0.19	-1.26	-1.45

2170+00, MSU St. 18

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.00	-0.02	-0.02
3	7.2	0.00	-0.05	-0.05
4	10.8	-0.02	-0.07	-0.09
5	14.4	0.00	-0.09	-0.09
6	18.0	0.00	-0.12	-0.12
7	21.6	-0.01	-0.14	-0.15
8	25.2	0.00	-0.17	-0.17
9	28.8	-0.12	-0.19	-0.31
10	32.4	-0.02	-0.21	-0.23
11	36.0	-0.03	-0.24	-0.27
12	39.6	-0.01	-0.26	-0.27
13	43.2	-0.02	-0.28	-0.30
14	46.8	-0.02	-0.31	-0.33
15	50.4	-0.01	-0.33	-0.34
16	54.0	-0.02	-0.36	-0.38
17	57.6	-0.01	-0.38	-0.39
18	61.2	0.00	-0.40	-0.40
19	64.8	0.00	-0.43	-0.43
20	68.4	0.00	-0.45	-0.45
21	72.0	0.00	-0.47	-0.47
22	75.6	0.02	-0.50	-0.48
23	79.2	0.02	-0.52	-0.50
24	82.8	0.04	-0.55	-0.51
25	86.4	0.04	-0.57	-0.53
26	90.0	0.02	-0.59	-0.57
27	93.6	0.04	-0.62	-0.58
28	97.2	0.07	-0.64	-0.57
29	100.8	0.05	-0.66	-0.61
30	104.4	0.04	-0.69	-0.65
31	108.0	0.02	-0.71	-0.69
32	111.6	0.00	-0.74	-0.74
33	115.2	0.00	-0.76	-0.76
34	118.8	0.00	-0.78	-0.78
35	122.4	-0.01	-0.81	-0.82
36	126.0	-0.02	-0.83	-0.85
37	129.6	-0.02	-0.85	-0.87
38	133.2	-0.02	-0.88	-0.90
39	136.8	-0.02	-0.90	-0.92
40	140.4	0.00	-0.93	-0.93
41	144.0	0.00	-0.95	-0.95
42	147.6	-0.02	-0.97	-0.99
43	151.2	-0.07	-1.00	-1.07
44	154.8	-0.10	-1.02	-1.12

Glendive Experimental Test Section, 1992

Table 10WP. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Passing Lane.

2164+00, MSU St. 19

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.03	-0.02	0.01
3	7.2	0.07	-0.04	0.03
4	10.8	0.07	-0.06	0.01
5	14.4	0.07	-0.08	-0.01
6	18.0	0.08	-0.10	-0.02
7	21.6	0.09	-0.13	-0.04
8	25.2	0.09	-0.15	-0.06
9	28.8	0.10	-0.17	-0.07
10	32.4	0.10	-0.19	-0.09
11	36.0	0.10	-0.21	-0.11
12	39.6	0.10	-0.23	-0.13
13	43.2	0.10	-0.25	-0.15
14	46.8	1.00	-0.27	0.73
15	50.4	0.10	-0.29	-0.19
16	54.0	0.11	-0.31	-0.20
17	57.6	0.14	-0.33	-0.19
18	61.2	0.18	-0.36	-0.18
19	64.8	0.20	-0.38	-0.18
20	68.4	0.20	-0.40	-0.20
21	72.0	0.20	-0.42	-0.22
22	75.6	0.21	-0.44	-0.23
23	79.2	0.20	-0.46	-0.26
24	82.8	0.20	-0.48	-0.28
25	86.4	0.21	-0.50	-0.29
26	90.0	0.20	-0.52	-0.32
27	93.6	0.20	-0.54	-0.34
28	97.2	0.20	-0.57	-0.37
29	100.8	0.17	-0.59	-0.42
30	104.4	0.17	-0.61	-0.44
31	108.0	0.12	-0.63	-0.51
32	111.6	0.12	-0.65	-0.53
33	115.2	0.10	-0.67	-0.57
34	118.8	0.10	-0.69	-0.59
35	122.4	0.10	-0.71	-0.61
36	126.0	0.10	-0.73	-0.63
37	129.6	0.10	-0.75	-0.65
38	133.2	0.10	-0.77	-0.67
39	136.8	0.10	-0.80	-0.70
40	140.4	0.10	-0.82	-0.72
41	144.0	0.08	-0.84	-0.76
42	147.6	0.07	-0.86	-0.79
43	151.2	0.04	-0.88	-0.84
44	154.8	0.00	-0.90	-0.90

2160+00, MSU St. 20

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.10	-0.04	0.06
3	7.2	0.08	-0.08	0.00
4	10.8	0.07	-0.11	-0.04
5	14.4	0.07	-0.15	-0.08
6	18.0	0.06	-0.19	-0.13
7	21.6	0.05	-0.23	-0.18
8	25.2	0.05	-0.26	-0.21
9	28.8	0.09	-0.30	-0.21
10	32.4	0.09	-0.34	-0.25
11	36.0	0.08	-0.38	-0.30
12	39.6	0.09	-0.41	-0.32
13	43.2	0.07	-0.45	-0.38
14	46.8	0.07	-0.49	-0.42
15	50.4	0.06	-0.53	-0.47
16	54.0	0.09	-0.57	-0.48
17	57.6	0.08	-0.60	-0.52
18	61.2	0.09	-0.64	-0.55
19	64.8	0.10	-0.68	-0.58
20	68.4	0.10	-0.72	-0.62
21	72.0	0.11	-0.75	-0.64
22	75.6	0.11	-0.79	-0.68
23	79.2	0.10	-0.83	-0.73
24	82.8	0.10	-0.87	-0.77
25	86.4	0.10	-0.90	-0.80
26	90.0	0.11	-0.94	-0.83
27	93.6	0.11	-0.98	-0.87
28	97.2	0.12	-1.02	-0.90
29	100.8	0.11	-1.05	-0.94
30	104.4	0.11	-1.09	-0.98
31	108.0	0.10	-1.13	-1.03
32	111.6	0.10	-1.17	-1.07
33	115.2	0.10	-1.21	-1.11
34	118.8	0.10	-1.24	-1.14
35	122.4	0.09	-1.28	-1.19
36	126.0	0.08	-1.32	-1.24
37	129.6	0.07	-1.36	-1.29
38	133.2	0.08	-1.39	-1.31
39	136.8	0.10	-1.43	-1.33
40	140.4	0.10	-1.47	-1.37
41	144.0	0.09	-1.51	-1.42
42	147.6	0.07	-1.54	-1.47
43	151.2	0.02	-1.58	-1.56
44	154.8	0.00	-1.62	-1.62

Table 11WP. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Passing Lane.

2154+00, MSU St. 21

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.01	-0.05	-0.04
3	7.2	0.02	-0.10	-0.08
4	10.8	0.02	-0.15	-0.13
5	14.4	0.02	-0.20	-0.18
6	18.0	0.02	-0.25	-0.23
7	21.6	0.03	-0.30	-0.27
8	25.2	0.03	-0.35	-0.32
9	28.8	0.06	-0.40	-0.34
10	32.4	0.08	-0.45	-0.37
11	36.0	0.04	-0.50	-0.46
12	39.6	0.06	-0.55	-0.49
13	43.2	0.07	-0.60	-0.53
14	46.8	0.08	-0.65	-0.57
15	50.4	0.10	-0.70	-0.60
16	54.0	0.10	-0.75	-0.65
17	57.6	0.12	-0.80	-0.68
18	61.2	0.12	-0.85	-0.73
19	64.8	0.16	-0.90	-0.74
20	68.4	0.15	-0.95	-0.80
21	72.0	0.16	-1.00	-0.84
22	75.6	0.20	-1.05	-0.85
23	79.2	0.20	-1.11	-0.91
24	82.8	0.22	-1.16	-0.94
25	86.4	0.22	-1.21	-0.99
26	90.0	0.22	-1.26	-1.04
27	93.6	0.22	-1.31	-1.09
28	97.2	0.22	-1.36	-1.14
29	100.8	0.20	-1.41	-1.21
30	104.4	0.20	-1.46	-1.26
31	108.0	0.20	-1.51	-1.31
32	111.6	0.14	-1.56	-1.42
33	115.2	0.13	-1.61	-1.48
34	118.8	0.12	-1.66	-1.54
35	122.4	0.12	-1.71	-1.59
36	126.0	0.12	-1.76	-1.64
37	129.6	0.12	-1.81	-1.69
38	133.2	0.18	-1.86	-1.68
39	136.8	0.20	-1.91	-1.71
40	140.4	0.14	-1.96	-1.82
41	144.0	0.12	-2.01	-1.89
42	147.6	0.10	-2.06	-1.96
43	151.2	0.07	-2.11	-2.04
44	154.8	0.00	-2.16	-2.16

2150+00, MSU St. 22

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.01	-0.06	-0.05
3	7.2	0.02	-0.12	-0.10
4	10.8	0.02	-0.18	-0.16
5	14.4	0.01	-0.24	-0.23
6	18.0	0.04	-0.30	-0.26
7	21.6	0.05	-0.36	-0.31
8	25.2	0.06	-0.42	-0.36
9	28.8	0.07	-0.48	-0.41
10	32.4	0.08	-0.54	-0.46
11	36.0	0.08	-0.60	-0.52
12	39.6	0.09	-0.66	-0.57
13	43.2	0.08	-0.72	-0.64
14	46.8	0.09	-0.78	-0.69
15	50.4	0.10	-0.84	-0.74
16	54.0	0.12	-0.90	-0.78
17	57.6	0.11	-0.96	-0.85
18	61.2	0.17	-1.02	-0.85
19	64.8	0.17	-1.08	-0.91
20	68.4	0.17	-1.14	-0.97
21	72.0	0.17	-1.20	-1.03
22	75.6	0.18	-1.26	-1.08
23	79.2	0.18	-1.32	-1.14
24	82.8	0.23	-1.38	-1.15
25	86.4	0.23	-1.44	-1.21
26	90.0	0.23	-1.50	-1.27
27	93.6	0.23	-1.56	-1.33
28	97.2	0.23	-1.62	-1.39
29	100.8	0.18	-1.68	-1.50
30	104.4	0.19	-1.74	-1.55
31	108.0	0.18	-1.80	-1.62
32	111.6	0.17	-1.86	-1.69
33	115.2	0.17	-1.92	-1.75
34	118.8	0.17	-1.98	-1.81
35	122.4	0.15	-2.04	-1.89
36	126.0	0.15	-2.10	-1.95
37	129.6	0.15	-2.16	-2.01
38	133.2	0.15	-2.22	-2.07
39	136.8	0.17	-2.28	-2.11
40	140.4	0.14	-2.34	-2.20
41	144.0	0.14	-2.40	-2.26
42	147.6	0.11	-2.46	-2.35
43	151.2	0.09	-2.52	-2.43
44	154.8	0.07	-2.58	-2.51

Table 12WP. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Passing Lane.

2144+00, MSU St. 23

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.02	-0.06	-0.04
3	7.2	0.05	-0.11	-0.06
4	10.8	0.07	-0.17	-0.10
5	14.4	0.08	-0.22	-0.14
6	18.0	0.08	-0.28	-0.20
7	21.6	0.10	-0.33	-0.23
8	25.2	0.10	-0.39	-0.29
9	28.8	0.10	-0.45	-0.35
10	32.4	0.11	-0.50	-0.39
11	36.0	0.10	-0.56	-0.46
12	39.6	0.17	-0.61	-0.44
13	43.2	0.20	-0.67	-0.47
14	46.8	0.20	-0.73	-0.53
15	50.4	0.21	-0.78	-0.57
16	54.0	0.25	-0.84	-0.59
17	57.6	0.26	-0.89	-0.63
18	61.2	0.30	-0.95	-0.65
19	64.8	0.30	-1.00	-0.70
20	68.4	0.29	-1.06	-0.77
21	72.0	0.30	-1.12	-0.82
22	75.6	0.30	-1.17	-0.87
23	79.2	0.32	-1.23	-0.91
24	82.8	0.36	-1.28	-0.92
25	86.4	0.38	-1.34	-0.96
26	90.0	0.40	-1.40	-1.00
27	93.6	0.41	-1.45	-1.04
28	97.2	0.41	-1.51	-1.10
29	100.8	0.42	-1.56	-1.14
30	104.4	0.41	-1.62	-1.21
31	108.0	0.41	-1.67	-1.26
32	111.6	0.41	-1.73	-1.32
33	115.2	0.42	-1.79	-1.37
34	118.8	0.46	-1.84	-1.38
35	122.4	0.48	-1.90	-1.42
36	126.0	0.48	-1.95	-1.47
37	129.6	0.47	-2.01	-1.54
38	133.2	0.46	-2.07	-1.61
39	136.8	0.40	-2.12	-1.72
40	140.4	0.40	-2.18	-1.78
41	144.0	0.37	-2.23	-1.86
42	147.6	0.30	-2.29	-1.99
43	151.2	0.28	-2.34	-2.06
44	154.8	0.20	-2.40	-2.20

2138+00, MSU St. 24

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.02	-0.06	-0.04
3	7.2	0.02	-0.12	-0.10
4	10.8	0.03	-0.18	-0.15
5	14.4	0.05	-0.24	-0.19
6	18.0	0.06	-0.30	-0.24
7	21.6	0.07	-0.36	-0.29
8	25.2	0.07	-0.42	-0.35
9	28.8	0.07	-0.48	-0.41
10	32.4	0.08	-0.54	-0.46
11	36.0	0.08	-0.60	-0.52
12	39.6	0.09	-0.66	-0.57
13	43.2	0.10	-0.72	-0.62
14	46.8	0.09	-0.78	-0.69
15	50.4	0.12	-0.84	-0.72
16	54.0	0.16	-0.90	-0.74
17	57.6	0.16	-0.96	-0.80
18	61.2	0.17	-1.02	-0.85
19	64.8	0.20	-1.08	-0.88
20	68.4	0.23	-1.14	-0.91
21	72.0	0.26	-1.20	-0.94
22	75.6	0.27	-1.26	-0.99
23	79.2	0.27	-1.32	-1.05
24	82.8	0.30	-1.38	-1.08
25	86.4	0.35	-1.44	-1.09
26	90.0	0.36	-1.50	-1.14
27	93.6	0.35	-1.56	-1.21
28	97.2	0.32	-1.62	-1.30
29	100.8	0.36	-1.68	-1.32
30	104.4	0.30	-1.74	-1.44
31	108.0	0.27	-1.80	-1.53
32	111.6	0.27	-1.86	-1.59
33	115.2	0.26	-1.92	-1.66
34	118.8	0.26	-1.98	-1.72
35	122.4	0.26	-2.04	-1.78
36	126.0	0.26	-2.10	-1.84
37	129.6	0.28	-2.16	-1.88
38	133.2	0.28	-2.22	-1.94
39	136.8	0.27	-2.28	-2.01
40	140.4	0.27	-2.34	-2.07
41	144.0	0.25	-2.40	-2.15
42	147.6	0.22	-2.46	-2.24
43	151.2	0.17	-2.52	-2.35
44	154.8	0.17	-2.58	-2.41

Table 13WP. Coordinate System of the First Annual Post-construction Pavement Profile of West Bound Passing Lane.

2134+00, MSU St. 25

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.00	-0.05	-0.05
3	7.2	0.01	-0.10	-0.09
4	10.8	0.02	-0.15	-0.13
5	14.4	0.03	-0.20	-0.17
6	18.0	0.03	-0.24	-0.21
7	21.6	0.04	-0.29	-0.25
8	25.2	0.04	-0.34	-0.30
9	28.8	0.04	-0.39	-0.35
10	32.4	0.05	-0.44	-0.39
11	36.0	0.05	-0.49	-0.44
12	39.6	0.06	-0.54	-0.48
13	43.2	0.07	-0.59	-0.52
14	46.8	0.07	-0.63	-0.56
15	50.4	0.10	-0.68	-0.58
16	54.0	0.10	-0.73	-0.63
17	57.6	0.11	-0.78	-0.67
18	61.2	0.12	-0.83	-0.71
19	64.8	0.12	-0.88	-0.76
20	68.4	0.15	-0.93	-0.78
21	72.0	0.18	-0.98	-0.80
22	75.6	0.19	-1.03	-0.84
23	79.2	0.20	-1.07	-0.87
24	82.8	0.20	-1.12	-0.92
25	86.4	0.20	-1.17	-0.97
26	90.0	0.21	-1.22	-1.01
27	93.6	0.20	-1.27	-1.07
28	97.2	0.18	-1.32	-1.14
29	100.8	0.18	-1.37	-1.19
30	104.4	0.18	-1.42	-1.24
31	108.0	0.17	-1.47	-1.30
32	111.6	0.18	-1.51	-1.33
33	115.2	0.16	-1.56	-1.40
34	118.8	0.15	-1.61	-1.46
35	122.4	0.15	-1.66	-1.51
36	126.0	0.17	-1.71	-1.54
37	129.6	0.17	-1.76	-1.59
38	133.2	0.20	-1.81	-1.61
39	136.8	0.17	-1.86	-1.69
40	140.4	0.15	-1.90	-1.75
41	144.0	0.12	-1.95	-1.83
42	147.6	0.10	-2.00	-1.90
43	151.2	0.09	-2.05	-1.96
44	154.8	0.02	-2.10	-2.08

2130+00, MSU St. 26

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0.00	0.00	0.00
2	3.6	0.02	-0.05	-0.03
3	7.2	0.03	-0.11	-0.08
4	10.8	0.04	-0.16	-0.12
5	14.4	0.05	-0.22	-0.17
6	18.0	0.06	-0.27	-0.21
7	21.6	0.08	-0.33	-0.25
8	25.2	0.08	-0.38	-0.30
9	28.8	0.08	-0.44	-0.36
10	32.4	0.08	-0.49	-0.41
11	36.0	0.07	-0.54	-0.47
12	39.6	0.09	-0.60	-0.51
13	43.2	0.09	-0.65	-0.56
14	46.8	0.10	-0.71	-0.61
15	50.4	0.10	-0.76	-0.66
16	54.0	0.11	-0.82	-0.71
17	57.6	0.12	-0.87	-0.75
18	61.2	0.13	-0.93	-0.80
19	64.8	0.15	-0.98	-0.83
20	68.4	0.16	-1.03	-0.87
21	72.0	0.17	-1.09	-0.92
22	75.6	0.18	-1.14	-0.96
23	79.2	0.20	-1.20	-1.00
24	82.8	0.19	-1.25	-1.06
25	86.4	0.20	-1.31	-1.11
26	90.0	0.20	-1.36	-1.16
27	93.6	0.20	-1.41	-1.21
28	97.2	0.20	-1.47	-1.27
29	100.8	0.18	-1.52	-1.34
30	104.4	0.17	-1.58	-1.41
31	108.0	0.16	-1.63	-1.47
32	111.6	0.14	-1.69	-1.55
33	115.2	0.12	-1.74	-1.62
34	118.8	0.11	-1.80	-1.69
35	122.4	0.10	-1.85	-1.75
36	126.0	0.10	-1.90	-1.80
37	129.6	0.10	-1.96	-1.86
38	133.2	0.12	-2.01	-1.89
39	136.8	0.10	-2.07	-1.97
40	140.4	0.08	-2.12	-2.04
41	144.0	0.07	-2.18	-2.11
42	147.6	0.02	-2.23	-2.21
43	151.2	0.02	-2.29	-2.27
44	154.8	0.00	-2.34	-2.34

Appendix C

-Tables 1ED to 13ED - Coordinate System of First Annual Post-construction Pavement Profiles of East Bound Driving Lane

-Tables 1EP to 13EP - Coordinate System of First Annual Post-construction Pavement Profile of East Bound Passing Lane

Table 1ED. Coordinate System of the First Annual Post-construction Pavement Profile of East Bound Driving Lane.

2130+00, MSU St. 27

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.01	-0.06	-0.05
3	7.2	0.02	-0.11	-0.09
4	10.8	0.02	-0.17	-0.15
5	14.4	-0.01	-0.23	-0.24
6	18.0	0.04	-0.29	-0.25
7	21.6	0.08	-0.34	-0.26
8	25.2	0.08	-0.40	-0.32
9	28.8	0.11	-0.46	-0.35
10	32.4	0.14	-0.51	-0.37
11	36.0	0.19	-0.57	-0.38
12	39.6	0.25	-0.63	-0.38
13	43.2	0.29	-0.69	-0.40
14	46.8	0.32	-0.74	-0.42
15	50.4	0.39	-0.80	-0.41
16	54.0	0.41	-0.86	-0.45
17	57.6	0.41	-0.92	-0.51
18	61.2	0.46	-0.97	-0.51
19	64.8	0.48	-1.03	-0.55
20	68.4	0.48	-1.09	-0.61
21	72.0	0.48	-1.14	-0.66
22	75.6	0.48	-1.20	-0.72
23	79.2	0.47	-1.26	-0.79
24	82.8	0.46	-1.32	-0.86
25	86.4	0.42	-1.37	-0.95
26	90.0	0.40	-1.43	-1.03
27	93.6	0.40	-1.49	-1.09
28	97.2	0.41	-1.54	-1.13
29	100.8	0.44	-1.60	-1.16
30	104.4	0.44	-1.66	-1.22
31	108.0	0.47	-1.72	-1.25
32	111.6	0.49	-1.77	-1.28
33	115.2	0.50	-1.83	-1.33
34	118.8	0.59	-1.89	-1.30
35	122.4	0.59	-1.95	-1.36
36	126.0	0.59	-2.00	-1.41
37	129.6	0.52	-2.06	-1.54
38	133.2	0.49	-2.12	-1.63
39	136.8	0.39	-2.17	-1.78
40	140.4	0.34	-2.23	-1.89
41	144.0	0.27	-2.29	-2.02
42	147.6	0.17	-2.35	-2.18
43	151.2	0.09	-2.40	-2.31
44	154.8	-0.01	-2.46	-2.47

2134+00, MSU St. 28

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.03	-0.07	-0.04
3	7.2	0.05	-0.14	-0.09
4	10.8	0.09	-0.21	-0.12
5	14.4	0.09	-0.28	-0.19
6	18.0	0.09	-0.36	-0.27
7	21.6	0.10	-0.43	-0.33
8	25.2	0.09	-0.50	-0.41
9	28.8	0.12	-0.57	-0.45
10	32.4	0.18	-0.64	-0.46
11	36.0	0.20	-0.71	-0.51
12	39.6	0.25	-0.78	-0.53
13	43.2	0.30	-0.85	-0.55
14	46.8	0.33	-0.93	-0.60
15	50.4	0.39	-1.00	-0.61
16	54.0	0.40	-1.07	-0.67
17	57.6	0.41	-1.14	-0.73
18	61.2	0.45	-1.21	-0.76
19	64.8	0.46	-1.28	-0.82
20	68.4	0.45	-1.35	-0.90
21	72.0	0.48	-1.42	-0.94
22	75.6	0.49	-1.49	-1.00
23	79.2	0.45	-1.57	-1.12
24	82.8	0.44	-1.64	-1.20
25	86.4	0.42	-1.71	-1.29
26	90.0	0.41	-1.78	-1.37
27	93.6	0.40	-1.85	-1.45
28	97.2	0.41	-1.92	-1.51
29	100.8	0.42	-1.99	-1.57
30	104.4	0.42	-2.06	-1.64
31	108.0	0.46	-2.13	-1.67
32	111.6	0.50	-2.21	-1.71
33	115.2	0.51	-2.28	-1.77
34	118.8	0.57	-2.35	-1.78
35	122.4	0.58	-2.42	-1.84
36	126.0	0.52	-2.49	-1.97
37	129.6	0.51	-2.56	-2.05
38	133.2	0.51	-2.63	-2.12
39	136.8	0.50	-2.70	-2.20
40	140.4	0.40	-2.78	-2.38
41	144.0	0.30	-2.85	-2.55
42	147.6	0.20	-2.92	-2.72
43	151.2	0.10	-2.99	-2.89
44	154.8	0.00	-3.06	-3.06

Table 2ED. Coordinate System of the First Annual Post-construction Pavement Profile of East Bound Driving Lane.

2138+00, MSU St. 29

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.01	-0.06	-0.05
3	7.2	0.08	-0.13	-0.05
4	10.8	0.09	-0.19	-0.10
5	14.4	0.10	-0.26	-0.16
6	18.0	0.11	-0.32	-0.21
7	21.6	0.10	-0.39	-0.29
8	25.2	0.10	-0.45	-0.35
9	28.8	0.12	-0.51	-0.39
10	32.4	0.18	-0.58	-0.40
11	36.0	0.19	-0.64	-0.45
12	39.6	0.21	-0.71	-0.50
13	43.2	0.24	-0.77	-0.53
14	46.8	0.29	-0.83	-0.54
15	50.4	0.33	-0.90	-0.57
16	54.0	0.39	-0.96	-0.57
17	57.6	0.40	-1.03	-0.63
18	61.2	0.42	-1.09	-0.67
19	64.8	0.44	-1.16	-0.72
20	68.4	0.44	-1.22	-0.78
21	72.0	0.45	-1.28	-0.83
22	75.6	0.48	-1.35	-0.87
23	79.2	0.49	-1.41	-0.92
24	82.8	0.48	-1.48	-1.00
25	86.4	0.45	-1.54	-1.09
26	90.0	0.43	-1.60	-1.17
27	93.6	0.40	-1.67	-1.27
28	97.2	0.40	-1.73	-1.33
29	100.8	0.39	-1.80	-1.41
30	104.4	0.39	-1.86	-1.47
31	108.0	0.39	-1.93	-1.54
32	111.6	0.40	-1.99	-1.59
33	115.2	0.40	-2.05	-1.65
34	118.8	0.42	-2.12	-1.70
35	122.4	0.44	-2.18	-1.74
36	126.0	0.43	-2.25	-1.82
37	129.6	0.41	-2.31	-1.90
38	133.2	0.41	-2.37	-1.96
39	136.8	0.40	-2.44	-2.04
40	140.4	0.40	-2.50	-2.10
41	144.0	0.31	-2.57	-2.26
42	147.6	0.27	-2.63	-2.36
43	151.2	0.17	-2.70	-2.53
44	154.8	0.06	-2.76	-2.70

2144+00, MSU St. 30

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.01	-0.06	-0.05
3	7.2	0.04	-0.13	-0.09
4	10.8	0.08	-0.19	-0.11
5	14.4	0.09	-0.26	-0.17
6	18.0	0.10	-0.32	-0.22
7	21.6	0.08	-0.39	-0.31
8	25.2	0.05	-0.45	-0.40
9	28.8	0.07	-0.51	-0.44
10	32.4	0.10	-0.58	-0.48
11	36.0	0.11	-0.64	-0.53
12	39.6	0.15	-0.71	-0.56
13	43.2	0.19	-0.77	-0.58
14	46.8	0.21	-0.83	-0.62
15	50.4	0.28	-0.90	-0.62
16	54.0	0.34	-0.96	-0.62
17	57.6	0.37	-1.03	-0.66
18	61.2	0.40	-1.09	-0.69
19	64.8	0.41	-1.16	-0.75
20	68.4	0.44	-1.22	-0.78
21	72.0	0.49	-1.28	-0.79
22	75.6	0.50	-1.35	-0.85
23	79.2	0.50	-1.41	-0.91
24	82.8	0.51	-1.48	-0.97
25	86.4	0.51	-1.54	-1.03
26	90.0	0.49	-1.60	-1.11
27	93.6	0.48	-1.67	-1.19
28	97.2	0.46	-1.73	-1.27
29	100.8	0.45	-1.80	-1.35
30	104.4	0.42	-1.86	-1.44
31	108.0	0.44	-1.93	-1.49
32	111.6	0.46	-1.99	-1.53
33	115.2	0.49	-2.05	-1.56
34	118.8	0.53	-2.12	-1.59
35	122.4	0.57	-2.18	-1.61
36	126.0	0.54	-2.25	-1.71
37	129.6	0.54	-2.31	-1.77
38	133.2	0.54	-2.37	-1.83
39	136.8	0.53	-2.44	-1.91
40	140.4	0.45	-2.50	-2.05
41	144.0	0.38	-2.57	-2.19
42	147.6	0.28	-2.63	-2.35
43	151.2	0.20	-2.70	-2.50
44	154.8	0.10	-2.76	-2.66

Glendive Experimental Test Section, 1992

Table 3ED. Coordinate System of the First Annual Post-construction Pavement Profile of East Bound Driving Lane.

2150+00, MSU St. 31

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.04	-0.06	-0.02
3	7.2	0.08	-0.12	-0.04
4	10.8	0.10	-0.18	-0.08
5	14.4	0.12	-0.24	-0.12
6	18.0	0.13	-0.30	-0.17
7	21.6	0.13	-0.36	-0.23
8	25.2	0.13	-0.42	-0.29
9	28.8	0.13	-0.48	-0.35
10	32.4	0.14	-0.54	-0.40
11	36.0	0.14	-0.60	-0.46
12	39.6	0.18	-0.66	-0.48
13	43.2	0.17	-0.72	-0.55
14	46.8	0.20	-0.78	-0.58
15	50.4	0.27	-0.84	-0.57
16	54.0	0.33	-0.90	-0.57
17	57.6	0.35	-0.96	-0.61
18	61.2	0.41	-1.02	-0.61
19	64.8	0.43	-1.08	-0.65
20	68.4	0.43	-1.14	-0.71
21	72.0	0.46	-1.20	-0.74
22	75.6	0.48	-1.26	-0.78
23	79.2	0.48	-1.32	-0.84
24	82.8	0.51	-1.38	-0.87
25	86.4	0.53	-1.44	-0.91
26	90.0	0.43	-1.50	-1.07
27	93.6	0.41	-1.56	-1.15
28	97.2	0.34	-1.62	-1.28
29	100.8	0.33	-1.68	-1.35
30	104.4	0.31	-1.74	-1.43
31	108.0	0.32	-1.80	-1.48
32	111.6	0.33	-1.86	-1.53
33	115.2	0.34	-1.92	-1.58
34	118.8	0.34	-1.98	-1.64
35	122.4	0.37	-2.04	-1.67
36	126.0	0.47	-2.10	-1.63
37	129.6	0.45	-2.16	-1.71
38	133.2	0.45	-2.22	-1.77
39	136.8	0.43	-2.28	-1.85
40	140.4	0.40	-2.34	-1.94
41	144.0	0.32	-2.40	-2.08
42	147.6	0.18	-2.46	-2.28
43	151.2	0.12	-2.52	-2.40
44	154.8	0.00	-2.58	-2.58

2154+00, MSU St. 32

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.04	-0.04	-0.00
3	7.2	0.09	-0.09	0.00
4	10.8	0.10	-0.13	-0.03
5	14.4	0.10	-0.17	-0.07
6	18.0	0.10	-0.22	-0.12
7	21.6	0.10	-0.26	-0.16
8	25.2	0.10	-0.30	-0.20
9	28.8	0.10	-0.35	-0.25
10	32.4	0.11	-0.39	-0.28
11	36.0	0.11	-0.43	-0.32
12	39.6	0.16	-0.48	-0.32
13	43.2	0.20	-0.52	-0.32
14	46.8	0.24	-0.56	-0.32
15	50.4	0.30	-0.61	-0.31
16	54.0	0.33	-0.65	-0.32
17	57.6	0.33	-0.69	-0.36
18	61.2	0.37	-0.74	-0.37
19	64.8	0.39	-0.78	-0.39
20	68.4	0.40	-0.82	-0.42
21	72.0	0.40	-0.87	-0.47
22	75.6	0.40	-0.91	-0.51
23	79.2	0.40	-0.95	-0.55
24	82.8	0.40	-0.99	-0.59
25	86.4	0.40	-1.04	-0.64
26	90.0	0.37	-1.08	-0.71
27	93.6	0.33	-1.12	-0.79
28	97.2	0.31	-1.17	-0.86
29	100.8	0.31	-1.21	-0.90
30	104.4	0.30	-1.25	-0.95
31	108.0	0.31	-1.30	-0.99
32	111.6	0.32	-1.34	-1.02
33	115.2	0.35	-1.38	-1.03
34	118.8	0.37	-1.43	-1.06
35	122.4	0.37	-1.47	-1.10
36	126.0	0.38	-1.51	-1.13
37	129.6	0.39	-1.56	-1.17
38	133.2	0.40	-1.60	-1.20
39	136.8	0.40	-1.64	-1.24
40	140.4	0.45	-1.69	-1.24
41	144.0	0.39	-1.73	-1.34
42	147.6	0.24	-1.77	-1.53
43	151.2	0.15	-1.82	-1.67
44	154.8	0.00	-1.86	-1.86

Table 4ED. Coordinate System of the First Annual Post-construction Pavement Profile of East Bound Driving Lane.

2160+00, MSU St. 33

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.04	-0.06	-0.02
3	7.2	0.07	-0.13	-0.06
4	10.8	0.10	-0.19	-0.09
5	14.4	0.11	-0.25	-0.14
6	18.0	0.12	-0.31	-0.19
7	21.6	0.13	-0.38	-0.25
8	25.2	0.15	-0.44	-0.29
9	28.8	0.15	-0.50	-0.35
10	32.4	0.19	-0.57	-0.38
11	36.0	0.21	-0.63	-0.42
12	39.6	0.21	-0.69	-0.48
13	43.2	0.24	-0.75	-0.51
14	46.8	0.30	-0.82	-0.52
15	50.4	0.30	-0.88	-0.58
16	54.0	0.34	-0.94	-0.60
17	57.6	0.38	-1.00	-0.62
18	61.2	0.39	-1.07	-0.68
19	64.8	0.40	-1.13	-0.73
20	68.4	0.41	-1.19	-0.78
21	72.0	0.42	-1.26	-0.84
22	75.6	0.45	-1.32	-0.87
23	79.2	0.45	-1.38	-0.93
24	82.8	0.44	-1.44	-1.00
25	86.4	0.41	-1.51	-1.10
26	90.0	0.40	-1.57	-1.17
27	93.6	0.35	-1.63	-1.28
28	97.2	0.35	-1.70	-1.35
29	100.8	0.33	-1.76	-1.43
30	104.4	0.31	-1.82	-1.51
31	108.0	0.31	-1.88	-1.57
32	111.6	0.31	-1.95	-1.64
33	115.2	0.30	-2.01	-1.71
34	118.8	0.31	-2.07	-1.76
35	122.4	0.31	-2.13	-1.82
36	126.0	0.32	-2.20	-1.88
37	129.6	0.31	-2.26	-1.95
38	133.2	0.33	-2.32	-1.99
39	136.8	0.31	-2.39	-2.08
40	140.4	0.30	-2.45	-2.15
41	144.0	0.20	-2.51	-2.31
42	147.6	0.10	-2.57	-2.47
43	151.2	0.01	-2.64	-2.63
44	154.8	-0.09	-2.70	-2.79

2164+00, MSU St. 34

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.02	-0.06	-0.04
3	7.2	0.03	-0.12	-0.09
4	10.8	0.05	-0.18	-0.13
5	14.4	0.07	-0.24	-0.17
6	18.0	0.08	-0.30	-0.22
7	21.6	0.09	-0.36	-0.27
8	25.2	0.11	-0.42	-0.31
9	28.8	0.12	-0.48	-0.36
10	32.4	0.13	-0.54	-0.41
11	36.0	0.13	-0.60	-0.47
12	39.6	0.17	-0.66	-0.49
13	43.2	0.22	-0.72	-0.50
14	46.8	0.23	-0.78	-0.55
15	50.4	0.27	-0.84	-0.57
16	54.0	0.32	-0.90	-0.58
17	57.6	0.33	-0.96	-0.63
18	61.2	0.39	-1.02	-0.63
19	64.8	0.42	-1.08	-0.66
20	68.4	0.46	-1.14	-0.68
21	72.0	0.48	-1.20	-0.72
22	75.6	0.51	-1.26	-0.75
23	79.2	0.52	-1.32	-0.80
24	82.8	0.50	-1.38	-0.88
25	86.4	0.46	-1.44	-0.98
26	90.0	0.45	-1.50	-1.05
27	93.6	0.42	-1.56	-1.14
28	97.2	0.42	-1.62	-1.20
29	100.8	0.41	-1.68	-1.27
30	104.4	0.36	-1.74	-1.38
31	108.0	0.36	-1.80	-1.44
32	111.6	0.35	-1.86	-1.51
33	115.2	0.35	-1.92	-1.57
34	118.8	0.38	-1.98	-1.60
35	122.4	0.41	-2.04	-1.63
36	126.0	0.40	-2.10	-1.70
37	129.6	0.40	-2.16	-1.76
38	133.2	0.37	-2.22	-1.85
39	136.8	0.33	-2.28	-1.95
40	140.4	0.27	-2.34	-2.07
41	144.0	0.18	-2.40	-2.22
42	147.6	0.06	-2.46	-2.40
43	151.2	-0.02	-2.52	-2.54
44	154.8	-0.13	-2.58	-2.71

Table 5ED. Coordinate System of the First Annual Post-construction Pavement Profile of East Bound Driving Lane.

2170+00, MSU St. 35

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.02	-0.05	-0.03
3	7.2	0.06	-0.10	-0.04
4	10.8	0.09	-0.15	-0.06
5	14.4	0.10	-0.21	-0.11
6	18.0	0.11	-0.26	-0.15
7	21.6	0.14	-0.31	-0.17
8	25.2	0.15	-0.36	-0.21
9	28.8	0.18	-0.41	-0.23
10	32.4	0.20	-0.46	-0.26
11	36.0	0.20	-0.52	-0.32
12	39.6	0.22	-0.57	-0.35
13	43.2	0.24	-0.62	-0.38
14	46.8	0.28	-0.67	-0.39
15	50.4	0.30	-0.72	-0.42
16	54.0	0.38	-0.77	-0.39
17	57.6	0.40	-0.83	-0.43
18	61.2	0.44	-0.88	-0.44
19	64.8	0.50	-0.93	-0.43
20	68.4	0.50	-0.98	-0.48
21	72.0	0.54	-1.03	-0.49
22	75.6	0.58	-1.08	-0.50
23	79.2	0.57	-1.14	-0.57
24	82.8	0.57	-1.19	-0.62
25	86.4	0.57	-1.24	-0.67
26	90.0	0.53	-1.29	-0.76
27	93.6	0.50	-1.34	-0.84
28	97.2	0.50	-1.39	-0.89
29	100.8	0.50	-1.45	-0.95
30	104.4	0.48	-1.50	-1.02
31	108.0	0.45	-1.55	-1.10
32	111.6	0.44	-1.60	-1.16
33	115.2	0.45	-1.65	-1.20
34	118.8	0.45	-1.70	-1.25
35	122.4	0.48	-1.76	-1.28
36	126.0	0.49	-1.81	-1.32
37	129.6	0.50	-1.86	-1.36
38	133.2	0.48	-1.91	-1.43
39	136.8	0.42	-1.96	-1.54
40	140.4	0.38	-2.01	-1.63
41	144.0	0.26	-2.07	-1.81
42	147.6	0.14	-2.12	-1.98
43	151.2	0.04	-2.17	-2.13
44	154.8	-0.05	-2.22	-2.27

2176+00, MSU St. 36

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.05	-0.05	-0.00
3	7.2	0.10	-0.10	-0.00
4	10.8	0.13	-0.15	-0.02
5	14.4	0.12	-0.21	-0.09
6	18.0	0.13	-0.26	-0.13
7	21.6	0.10	-0.31	-0.21
8	25.2	0.09	-0.36	-0.27
9	28.8	0.13	-0.41	-0.28
10	32.4	0.15	-0.46	-0.31
11	36.0	0.17	-0.52	-0.35
12	39.6	0.25	-0.57	-0.32
13	43.2	0.29	-0.62	-0.33
14	46.8	0.35	-0.67	-0.32
15	50.4	0.43	-0.72	-0.29
16	54.0	0.51	-0.77	-0.26
17	57.6	0.55	-0.83	-0.28
18	61.2	0.55	-0.88	-0.33
19	64.8	0.56	-0.93	-0.37
20	68.4	0.58	-0.98	-0.40
21	72.0	0.62	-1.03	-0.41
22	75.6	0.64	-1.08	-0.44
23	79.2	0.63	-1.14	-0.51
24	82.8	0.63	-1.19	-0.56
25	86.4	0.62	-1.24	-0.62
26	90.0	0.55	-1.29	-0.74
27	93.6	0.54	-1.34	-0.80
28	97.2	0.50	-1.39	-0.89
29	100.8	0.48	-1.45	-0.97
30	104.4	0.48	-1.50	-1.02
31	108.0	0.49	-1.55	-1.06
32	111.6	0.55	-1.60	-1.05
33	115.2	0.55	-1.65	-1.10
34	118.8	0.59	-1.70	-1.11
35	122.4	0.65	-1.76	-1.11
36	126.0	0.70	-1.81	-1.11
37	129.6	0.75	-1.86	-1.11
38	133.2	0.73	-1.91	-1.18
39	136.8	0.71	-1.96	-1.25
40	140.4	0.61	-2.01	-1.40
41	144.0	0.49	-2.07	-1.58
42	147.6	0.35	-2.12	-1.77
43	151.2	0.25	-2.17	-1.92
44	154.8	0.15	-2.22	-2.07

Table 6ED. Coordinate System of the First Annual Post-construction Pavement Profile of East Bound Driving Lane.

2180+00, MSU St. 37

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.06	-0.06	0.00
3	7.2	0.12	-0.12	0.00
4	10.8	0.13	-0.18	-0.05
5	14.4	0.12	-0.23	-0.11
6	18.0	0.10	-0.29	-0.19
7	21.6	0.04	-0.35	-0.31
8	25.2	0.00	-0.41	-0.41
9	28.8	-0.01	-0.47	-0.48
10	32.4	0.02	-0.53	-0.51
11	36.0	0.10	-0.59	-0.49
12	39.6	0.12	-0.64	-0.52
13	43.2	0.17	-0.70	-0.53
14	46.8	0.28	-0.76	-0.48
15	50.4	0.41	-0.82	-0.41
16	54.0	0.52	-0.88	-0.36
17	57.6	0.56	-0.94	-0.38
18	61.2	0.59	-1.00	-0.41
19	64.8	0.61	-1.05	-0.44
20	68.4	0.62	-1.11	-0.49
21	72.0	0.62	-1.17	-0.55
22	75.6	0.62	-1.23	-0.61
23	79.2	0.62	-1.29	-0.67
24	82.8	0.62	-1.35	-0.73
25	86.4	0.56	-1.41	-0.85
26	90.0	0.53	-1.47	-0.94
27	93.6	0.49	-1.52	-1.03
28	97.2	0.42	-1.58	-1.16
29	100.8	0.36	-1.64	-1.28
30	104.4	0.36	-1.70	-1.34
31	108.0	0.40	-1.76	-1.36
32	111.6	0.42	-1.82	-1.40
33	115.2	0.45	-1.88	-1.43
34	118.8	0.55	-1.93	-1.38
35	122.4	0.65	-1.99	-1.34
36	126.0	0.72	-2.05	-1.33
37	129.6	0.62	-2.11	-1.49
38	133.2	0.56	-2.17	-1.61
39	136.8	0.52	-2.23	-1.71
40	140.4	0.37	-2.29	-1.92
41	144.0	0.23	-2.34	-2.11
42	147.6	0.12	-2.40	-2.28
43	151.2	0.02	-2.46	-2.44
44	154.8	-0.08	-2.52	-2.60

2184+00, MSU St. 38

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.06	-0.05	0.01
3	7.2	0.12	-0.11	0.01
4	10.8	0.13	-0.16	-0.03
5	14.4	0.12	-0.22	-0.10
6	18.0	0.10	-0.27	-0.17
7	21.6	0.04	-0.33	-0.29
8	25.2	0.00	-0.38	-0.38
9	28.8	-0.01	-0.44	-0.45
10	32.4	0.02	-0.49	-0.47
11	36.0	0.10	-0.54	-0.44
12	39.6	0.12	-0.60	-0.48
13	43.2	0.17	-0.65	-0.48
14	46.8	0.28	-0.71	-0.43
15	50.4	0.41	-0.76	-0.35
16	54.0	0.52	-0.82	-0.30
17	57.6	0.56	-0.87	-0.31
18	61.2	0.59	-0.93	-0.34
19	64.8	0.61	-0.98	-0.37
20	68.4	0.62	-1.03	-0.41
21	72.0	0.62	-1.09	-0.47
22	75.6	0.62	-1.14	-0.52
23	79.2	0.62	-1.20	-0.58
24	82.8	0.62	-1.25	-0.63
25	86.4	0.56	-1.31	-0.75
26	90.0	0.53	-1.36	-0.83
27	93.6	0.49	-1.41	-0.92
28	97.2	0.42	-1.47	-1.05
29	100.8	0.36	-1.52	-1.16
30	104.4	0.36	-1.58	-1.22
31	108.0	0.40	-1.63	-1.23
32	111.6	0.42	-1.69	-1.27
33	115.2	0.45	-1.74	-1.29
34	118.8	0.55	-1.80	-1.25
35	122.4	0.65	-1.85	-1.20
36	126.0	0.72	-1.90	-1.18
37	129.6	0.62	-1.96	-1.34
38	133.2	0.56	-2.01	-1.45
39	136.8	0.52	-2.07	-1.55
40	140.4	0.37	-2.12	-1.75
41	144.0	0.23	-2.18	-1.95
42	147.6	0.12	-2.23	-2.11
43	151.2	0.02	-2.29	-2.27
44	154.8	-0.08	-2.34	-2.42

Table 7ED. Coordinate System of the First Annual Post-construction Pavement Profile of East Bound Driving Lane.

2188+00, MSU St. 39

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.01	-0.05	-0.04
3	7.2	-0.05	-0.11	-0.16
4	10.8	-0.14	-0.16	-0.30
5	14.4	-0.16	-0.22	-0.38
6	18.0	-0.11	-0.27	-0.38
7	21.6	-0.10	-0.33	-0.43
8	25.2	-0.10	-0.38	-0.48
9	28.8	0.00	-0.44	-0.44
10	32.4	0.10	-0.49	-0.39
11	36.0	0.16	-0.54	-0.38
12	39.6	0.30	-0.60	-0.30
13	43.2	0.40	-0.65	-0.25
14	46.8	0.48	-0.71	-0.23
15	50.4	0.52	-0.76	-0.24
16	54.0	0.55	-0.82	-0.27
17	57.6	0.55	-0.87	-0.32
18	61.2	0.60	-0.93	-0.33
19	64.8	0.60	-0.98	-0.38
20	68.4	0.59	-1.03	-0.44
21	72.0	0.60	-1.09	-0.49
22	75.6	0.57	-1.14	-0.57
23	79.2	0.47	-1.20	-0.73
24	82.8	0.33	-1.25	-0.92
25	86.4	0.30	-1.31	-1.01
26	90.0	0.27	-1.36	-1.09
27	93.6	0.24	-1.41	-1.17
28	97.2	0.23	-1.47	-1.24
29	100.8	0.28	-1.52	-1.24
30	104.4	0.36	-1.58	-1.22
31	108.0	0.42	-1.63	-1.21
32	111.6	0.52	-1.69	-1.17
33	115.2	0.63	-1.74	-1.11
34	118.8	0.71	-1.80	-1.09
35	122.4	0.76	-1.85	-1.09
36	126.0	0.71	-1.90	-1.19
37	129.6	0.66	-1.96	-1.30
38	133.2	0.57	-2.01	-1.44
39	136.8	0.53	-2.07	-1.54
40	140.4	0.46	-2.12	-1.66
41	144.0	0.32	-2.18	-1.86
42	147.6	0.20	-2.23	-2.03
43	151.2	0.10	-2.29	-2.19
44	154.8	-0.02	-2.34	-2.36

2192+00, MSU St. 40

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	-0.04	-0.07	-0.11
3	7.2	-0.07	-0.13	-0.20
4	10.8	-0.07	-0.20	-0.27
5	14.4	0.00	-0.26	-0.26
6	18.0	0.05	-0.33	-0.28
7	21.6	0.10	-0.39	-0.29
8	25.2	0.17	-0.46	-0.29
9	28.8	0.30	-0.52	-0.22
10	32.4	0.44	-0.59	-0.15
11	36.0	0.57	-0.66	-0.09
12	39.6	0.63	-0.72	-0.09
13	43.2	0.67	-0.79	-0.12
14	46.8	0.68	-0.85	-0.17
15	50.4	0.70	-0.92	-0.22
16	54.0	0.70	-0.98	-0.28
17	57.6	0.71	-1.05	-0.34
18	61.2	0.74	-1.11	-0.37
19	64.8	0.74	-1.18	-0.44
20	68.4	0.73	-1.25	-0.52
21	72.0	0.71	-1.31	-0.60
22	75.6	0.68	-1.38	-0.70
23	79.2	0.60	-1.44	-0.84
24	82.8	0.60	-1.51	-0.91
25	86.4	0.60	-1.57	-0.97
26	90.0	0.62	-1.64	-1.02
27	93.6	0.70	-1.71	-1.01
28	97.2	0.73	-1.77	-1.04
29	100.8	0.80	-1.84	-1.04
30	104.4	0.90	-1.90	-1.00
31	108.0	1.04	-1.97	-0.93
32	111.6	1.10	-2.03	-0.93
33	115.2	1.12	-2.10	-0.98
34	118.8	1.08	-2.16	-1.08
35	122.4	0.98	-2.23	-1.25
36	126.0	0.93	-2.30	-1.37
37	129.6	0.85	-2.36	-1.51
38	133.2	0.80	-2.43	-1.63
39	136.8	0.73	-2.49	-1.76
40	140.4	0.65	-2.56	-1.91
41	144.0	0.57	-2.62	-2.05
42	147.6	0.40	-2.69	-2.29
43	151.2	0.33	-2.75	-2.42
44	154.8	0.18	-2.82	-2.64

Glendive Experimental Test Section, 1992

Table 8ED. Coordinate System of the First Annual Post-construction Pavement Profile of East Bound Driving Lane.

2196+00, MSU St. 41

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.09	-0.06	0.03
3	7.2	0.11	-0.12	-0.01
4	10.8	0.12	-0.18	-0.06
5	14.4	0.09	-0.25	-0.16
6	18.0	-0.03	-0.31	-0.34
7	21.6	-0.12	-0.37	-0.49
8	25.2	-0.16	-0.43	-0.59
9	28.8	-0.10	-0.49	-0.59
10	32.4	-0.08	-0.55	-0.63
11	36.0	-0.07	-0.61	-0.68
12	39.6	0.02	-0.68	-0.66
13	43.2	0.12	-0.74	-0.62
14	46.8	0.26	-0.80	-0.54
15	50.4	0.40	-0.86	-0.46
16	54.0	0.51	-0.92	-0.41
17	57.6	0.55	-0.98	-0.43
18	61.2	0.58	-1.04	-0.46
19	64.8	0.56	-1.11	-0.55
20	68.4	0.55	-1.17	-0.62
21	72.0	0.53	-1.23	-0.70
22	75.6	0.53	-1.29	-0.76
23	79.2	0.53	-1.35	-0.82
24	82.8	0.53	-1.41	-0.88
25	86.4	0.51	-1.47	-0.96
26	90.0	0.42	-1.53	-1.11
27	93.6	0.32	-1.60	-1.28
28	97.2	0.24	-1.66	-1.42
29	100.8	0.22	-1.72	-1.50
30	104.4	0.23	-1.78	-1.55
31	108.0	0.26	-1.84	-1.58
32	111.6	0.31	-1.90	-1.59
33	115.2	0.40	-1.96	-1.56
34	118.8	0.52	-2.03	-1.51
35	122.4	0.65	-2.09	-1.44
36	126.0	0.75	-2.15	-1.40
37	129.6	0.73	-2.21	-1.48
38	133.2	0.60	-2.27	-1.67
39	136.8	0.54	-2.33	-1.79
40	140.4	0.43	-2.39	-1.96
41	144.0	0.33	-2.46	-2.13
42	147.6	0.21	-2.52	-2.31
43	151.2	0.07	-2.58	-2.51
44	154.8	-0.07	-2.64	-2.71

2200+00, MSU St. 42

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.06	-0.05	0.01
3	7.2	0.14	-0.11	0.03
4	10.8	0.16	-0.16	-0.00
5	14.4	0.13	-0.22	-0.09
6	18.0	0.08	-0.27	-0.19
7	21.6	-0.04	-0.33	-0.37
8	25.2	-0.12	-0.38	-0.50
9	28.8	-0.07	-0.44	-0.51
10	32.4	0.02	-0.49	-0.47
11	36.0	0.00	-0.54	-0.54
12	39.6	0.05	-0.60	-0.55
13	43.2	0.18	-0.65	-0.47
14	46.8	0.36	-0.71	-0.35
15	50.4	0.48	-0.76	-0.28
16	54.0	0.56	-0.82	-0.26
17	57.6	0.56	-0.87	-0.31
18	61.2	0.56	-0.93	-0.37
19	64.8	0.54	-0.98	-0.44
20	68.4	0.53	-1.03	-0.50
21	72.0	0.56	-1.09	-0.53
22	75.6	0.58	-1.14	-0.56
23	79.2	0.58	-1.20	-0.62
24	82.8	0.58	-1.25	-0.67
25	86.4	0.56	-1.31	-0.75
26	90.0	0.47	-1.36	-0.89
27	93.6	0.34	-1.41	-1.07
28	97.2	0.21	-1.47	-1.26
29	100.8	0.19	-1.52	-1.33
30	104.4	0.26	-1.58	-1.32
31	108.0	0.27	-1.63	-1.36
32	111.6	0.27	-1.69	-1.42
33	115.2	0.32	-1.74	-1.42
34	118.8	0.48	-1.80	-1.32
35	122.4	0.64	-1.85	-1.21
36	126.0	0.68	-1.90	-1.22
37	129.6	0.62	-1.96	-1.34
38	133.2	0.55	-2.01	-1.46
39	136.8	0.48	-2.07	-1.59
40	140.4	0.46	-2.12	-1.66
41	144.0	0.37	-2.18	-1.81
42	147.6	0.26	-2.23	-1.97
43	151.2	0.13	-2.29	-2.16
44	154.8	-0.01	-2.34	-2.35

Table 9ED. Coordinate System of the First Annual Post-construction Pavement Profile of East Bound Driving Lane.

2208+00, MSU St. 43

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.04	-0.06	-0.02
3	7.2	0.08	-0.12	-0.04
4	10.8	0.10	-0.18	-0.08
5	14.4	0.11	-0.23	-0.12
6	18.0	0.11	-0.29	-0.18
7	21.6	0.13	-0.35	-0.22
8	25.2	0.18	-0.41	-0.23
9	28.8	0.20	-0.47	-0.27
10	32.4	0.24	-0.53	-0.29
11	36.0	0.28	-0.59	-0.31
12	39.6	0.33	-0.64	-0.31
13	43.2	0.39	-0.70	-0.31
14	46.8	0.40	-0.76	-0.36
15	50.4	0.46	-0.82	-0.36
16	54.0	0.50	-0.88	-0.38
17	57.6	0.52	-0.94	-0.42
18	61.2	0.58	-1.00	-0.42
19	64.8	0.60	-1.05	-0.45
20	68.4	0.61	-1.11	-0.50
21	72.0	0.63	-1.17	-0.54
22	75.6	0.66	-1.23	-0.57
23	79.2	0.65	-1.29	-0.64
24	82.8	0.63	-1.35	-0.72
25	86.4	0.60	-1.41	-0.81
26	90.0	0.60	-1.47	-0.87
27	93.6	0.60	-1.52	-0.92
28	97.2	0.60	-1.58	-0.98
29	100.8	0.60	-1.64	-1.04
30	104.4	0.60	-1.70	-1.10
31	108.0	0.60	-1.76	-1.16
32	111.6	0.63	-1.82	-1.19
33	115.2	0.63	-1.88	-1.25
34	118.8	0.67	-1.93	-1.26
35	122.4	0.67	-1.99	-1.32
36	126.0	0.66	-2.05	-1.39
37	129.6	0.65	-2.11	-1.46
38	133.2	0.64	-2.17	-1.53
39	136.8	0.60	-2.23	-1.63
40	140.4	0.45	-2.29	-1.84
41	144.0	0.33	-2.34	-2.01
42	147.6	0.20	-2.40	-2.20
43	151.2	0.10	-2.46	-2.36
44	154.8	0.00	-2.52	-2.52

2214+00, MSU St. 44

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.04	-0.06	-0.02
3	7.2	0.07	-0.11	-0.04
4	10.8	0.12	-0.17	-0.05
5	14.4	0.14	-0.23	-0.09
6	18.0	0.17	-0.29	-0.12
7	21.6	0.17	-0.34	-0.17
8	25.2	0.17	-0.40	-0.23
9	28.8	0.17	-0.46	-0.29
10	32.4	0.17	-0.51	-0.34
11	36.0	0.17	-0.57	-0.40
12	39.6	0.22	-0.63	-0.41
13	43.2	0.25	-0.69	-0.44
14	46.8	0.27	-0.74	-0.47
15	50.4	0.33	-0.80	-0.47
16	54.0	0.37	-0.86	-0.49
17	57.6	0.37	-0.92	-0.55
18	61.2	0.44	-0.97	-0.53
19	64.8	0.47	-1.03	-0.56
20	68.4	0.51	-1.09	-0.58
21	72.0	0.55	-1.14	-0.59
22	75.6	0.57	-1.20	-0.63
23	79.2	0.55	-1.26	-0.71
24	82.8	0.54	-1.32	-0.78
25	86.4	0.56	-1.37	-0.81
26	90.0	0.51	-1.43	-0.92
27	93.6	0.47	-1.49	-1.02
28	97.2	0.47	-1.54	-1.07
29	100.8	0.45	-1.60	-1.15
30	104.4	0.41	-1.66	-1.25
31	108.0	0.43	-1.72	-1.29
32	111.6	0.44	-1.77	-1.33
33	115.2	0.45	-1.83	-1.38
34	118.8	0.47	-1.89	-1.42
35	122.4	0.49	-1.95	-1.46
36	126.0	0.51	-2.00	-1.49
37	129.6	0.51	-2.06	-1.55
38	133.2	0.47	-2.12	-1.65
39	136.8	0.45	-2.17	-1.72
40	140.4	0.40	-2.23	-1.83
41	144.0	0.35	-2.29	-1.94
42	147.6	0.22	-2.35	-2.13
43	151.2	0.07	-2.40	-2.33
44	154.8	-0.05	-2.46	-2.51

Table 10ED. Coordinate System of the First Annual Post-construction Pavement Profile of East Bound Driving Lane.

2220+00, MSU St. 45

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.05	-0.04	0.01
3	7.2	0.09	-0.08	0.01
4	10.8	0.09	-0.12	-0.03
5	14.4	0.10	-0.16	-0.06
6	18.0	0.10	-0.20	-0.10
7	21.6	0.10	-0.24	-0.14
8	25.2	0.07	-0.28	-0.21
9	28.8	0.07	-0.32	-0.25
10	32.4	0.08	-0.36	-0.28
11	36.0	0.09	-0.40	-0.31
12	39.6	0.13	-0.45	-0.32
13	43.2	0.16	-0.49	-0.33
14	46.8	0.19	-0.53	-0.34
15	50.4	0.24	-0.57	-0.33
16	54.0	0.27	-0.61	-0.34
17	57.6	0.28	-0.65	-0.37
18	61.2	0.29	-0.69	-0.40
19	64.8	0.31	-0.73	-0.42
20	68.4	0.33	-0.77	-0.44
21	72.0	0.36	-0.81	-0.45
22	75.6	0.39	-0.85	-0.46
23	79.2	0.38	-0.89	-0.51
24	82.8	0.36	-0.93	-0.57
25	86.4	0.33	-0.97	-0.64
26	90.0	0.29	-1.01	-0.72
27	93.6	0.23	-1.05	-0.82
28	97.2	0.19	-1.09	-0.90
29	100.8	0.17	-1.13	-0.96
30	104.4	0.15	-1.17	-1.02
31	108.0	0.13	-1.21	-1.08
32	111.6	0.13	-1.25	-1.12
33	115.2	0.12	-1.29	-1.17
34	118.8	0.15	-1.34	-1.19
35	122.4	0.16	-1.38	-1.22
36	126.0	0.14	-1.42	-1.28
37	129.6	0.12	-1.46	-1.34
38	133.2	0.09	-1.50	-1.41
39	136.8	0.09	-1.54	-1.45
40	140.4	0.07	-1.58	-1.51
41	144.0	-0.03	-1.62	-1.65
42	147.6	-0.17	-1.66	-1.83
43	151.2	-0.29	-1.70	-1.99
44	154.8	-0.42	-1.74	-2.16

2226+00, MSU St. 46

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.06	-0.05	0.01
3	7.2	0.07	-0.11	-0.04
4	10.8	0.08	-0.16	-0.08
5	14.4	0.08	-0.21	-0.13
6	18.0	0.08	-0.27	-0.19
7	21.6	0.07	-0.32	-0.25
8	25.2	0.08	-0.37	-0.29
9	28.8	0.08	-0.42	-0.34
10	32.4	0.11	-0.48	-0.37
11	36.0	0.15	-0.53	-0.38
12	39.6	0.18	-0.58	-0.40
13	43.2	0.26	-0.64	-0.38
14	46.8	0.28	-0.69	-0.41
15	50.4	0.30	-0.74	-0.44
16	54.0	0.32	-0.80	-0.48
17	57.6	0.31	-0.85	-0.54
18	61.2	0.36	-0.90	-0.54
19	64.8	0.37	-0.95	-0.58
20	68.4	0.37	-1.01	-0.64
21	72.0	0.37	-1.06	-0.69
22	75.6	0.35	-1.11	-0.76
23	79.2	0.30	-1.17	-0.87
24	82.8	0.29	-1.22	-0.93
25	86.4	0.28	-1.27	-0.99
26	90.0	0.24	-1.33	-1.09
27	93.6	0.20	-1.38	-1.18
28	97.2	0.19	-1.43	-1.24
29	100.8	0.18	-1.48	-1.30
30	104.4	0.18	-1.54	-1.36
31	108.0	0.18	-1.59	-1.41
32	111.6	0.19	-1.64	-1.45
33	115.2	0.21	-1.70	-1.49
34	118.8	0.24	-1.75	-1.51
35	122.4	0.21	-1.80	-1.59
36	126.0	0.21	-1.86	-1.65
37	129.6	0.17	-1.91	-1.74
38	133.2	0.18	-1.96	-1.78
39	136.8	0.09	-2.01	-1.92
40	140.4	-0.02	-2.07	-2.09
41	144.0	-0.12	-2.12	-2.24
42	147.6	-0.26	-2.17	-2.43
43	151.2	-0.40	-2.23	-2.63
44	154.8	-0.52	-2.28	-2.80

Table 11ED. Coordinate System of the First Annual Post-construction Pavement Profile of East Bound Driving Lane.

2232+00, MSU St. 47

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.08	-0.04	0.04
3	7.2	0.07	-0.08	-0.01
4	10.8	0.20	-0.13	0.07
5	14.4	0.24	-0.17	0.07
6	18.0	0.26	-0.21	0.05
7	21.6	0.29	-0.25	0.04
8	25.2	0.30	-0.29	0.01
9	28.8	0.30	-0.33	-0.03
10	32.4	0.29	-0.38	-0.09
11	36.0	0.26	-0.42	-0.16
12	39.6	0.27	-0.46	-0.19
13	43.2	0.28	-0.50	-0.22
14	46.8	0.29	-0.54	-0.25
15	50.4	0.30	-0.59	-0.29
16	54.0	0.32	-0.63	-0.31
17	57.6	0.36	-0.67	-0.31
18	61.2	0.38	-0.71	-0.33
19	64.8	0.40	-0.75	-0.35
20	68.4	0.43	-0.80	-0.37
21	72.0	0.48	-0.84	-0.36
22	75.6	0.50	-0.88	-0.38
23	79.2	0.50	-0.92	-0.42
24	82.8	0.51	-0.96	-0.45
25	86.4	0.53	-1.00	-0.47
26	90.0	0.50	-1.05	-0.55
27	93.6	0.50	-1.09	-0.59
28	97.2	0.48	-1.13	-0.65
29	100.8	0.43	-1.17	-0.74
30	104.4	0.40	-1.21	-0.81
31	108.0	0.38	-1.26	-0.88
32	111.6	0.33	-1.30	-0.97
33	115.2	0.32	-1.34	-1.02
34	118.8	0.31	-1.38	-1.07
35	122.4	0.30	-1.42	-1.12
36	126.0	0.30	-1.47	-1.17
37	129.6	0.32	-1.51	-1.19
38	133.2	0.32	-1.55	-1.23
39	136.8	0.31	-1.59	-1.28
40	140.4	0.30	-1.63	-1.33
41	144.0	0.27	-1.67	-1.40
42	147.6	0.15	-1.72	-1.57
43	151.2	0.09	-1.76	-1.67
44	154.8	-0.02	-1.80	-1.82

2238+00, MSU St. 48

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.07	-0.04	0.03
3	7.2	0.11	-0.08	0.03
4	10.8	0.11	-0.12	-0.01
5	14.4	0.12	-0.16	-0.04
6	18.0	0.13	-0.20	-0.07
7	21.6	0.14	-0.24	-0.10
8	25.2	0.16	-0.28	-0.12
9	28.8	0.22	-0.32	-0.10
10	32.4	0.24	-0.36	-0.12
11	36.0	0.28	-0.40	-0.12
12	39.6	0.33	-0.45	-0.12
13	43.2	0.37	-0.49	-0.12
14	46.8	0.43	-0.53	-0.10
15	50.4	0.45	-0.57	-0.12
16	54.0	0.51	-0.61	-0.10
17	57.6	0.53	-0.65	-0.12
18	61.2	0.55	-0.69	-0.14
19	64.8	0.58	-0.73	-0.15
20	68.4	0.54	-0.77	-0.23
21	72.0	0.61	-0.81	-0.20
22	75.6	0.62	-0.85	-0.23
23	79.2	0.61	-0.89	-0.28
24	82.8	0.61	-0.93	-0.32
25	86.4	0.60	-0.97	-0.37
26	90.0	0.56	-1.01	-0.45
27	93.6	0.54	-1.05	-0.51
28	97.2	0.55	-1.09	-0.54
29	100.8	0.54	-1.13	-0.59
30	104.4	0.57	-1.17	-0.60
31	108.0	0.60	-1.21	-0.61
32	111.6	0.62	-1.25	-0.63
33	115.2	0.63	-1.29	-0.66
34	118.8	0.64	-1.34	-0.70
35	122.4	0.67	-1.38	-0.71
36	126.0	0.67	-1.42	-0.75
37	129.6	0.67	-1.46	-0.79
38	133.2	0.63	-1.50	-0.87
39	136.8	0.60	-1.54	-0.94
40	140.4	0.49	-1.58	-1.09
41	144.0	0.40	-1.62	-1.22
42	147.6	0.29	-1.66	-1.37
43	151.2	0.16	-1.70	-1.54
44	154.8	0.00	-1.74	-1.74

Table 12ED. Coordinate System of the First Annual Post-construction Pavement Profile of East Bound Driving Lane.

2244+00, MSU St. 49

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.01	-0.06	-0.05
3	7.2	0.04	-0.13	-0.09
4	10.8	0.04	-0.19	-0.15
5	14.4	0.07	-0.25	-0.18
6	18.0	0.08	-0.31	-0.23
7	21.6	0.10	-0.38	-0.28
8	25.2	0.15	-0.44	-0.29
9	28.8	0.19	-0.50	-0.31
10	32.4	0.27	-0.57	-0.30
11	36.0	0.30	-0.63	-0.33
12	39.6	0.37	-0.69	-0.32
13	43.2	0.40	-0.75	-0.35
14	46.8	0.41	-0.82	-0.41
15	50.4	0.47	-0.88	-0.41
16	54.0	0.50	-0.94	-0.44
17	57.6	0.54	-1.00	-0.46
18	61.2	0.57	-1.07	-0.50
19	64.8	0.57	-1.13	-0.56
20	68.4	0.57	-1.19	-0.62
21	72.0	0.58	-1.26	-0.68
22	75.6	0.58	-1.32	-0.74
23	79.2	0.55	-1.38	-0.83
24	82.8	0.54	-1.44	-0.90
25	86.4	0.54	-1.51	-0.97
26	90.0	0.55	-1.57	-1.02
27	93.6	0.53	-1.63	-1.10
28	97.2	0.56	-1.70	-1.14
29	100.8	0.57	-1.76	-1.19
30	104.4	0.58	-1.82	-1.24
31	108.0	0.60	-1.88	-1.28
32	111.6	0.66	-1.95	-1.29
33	115.2	0.67	-2.01	-1.34
34	118.8	0.71	-2.07	-1.36
35	122.4	0.69	-2.13	-1.44
36	126.0	0.58	-2.20	-1.62
37	129.6	0.62	-2.26	-1.64
38	133.2	0.51	-2.32	-1.81
39	136.8	0.39	-2.39	-2.00
40	140.4	0.30	-2.45	-2.15
41	144.0	0.29	-2.51	-2.22
42	147.6	0.09	-2.57	-2.48
43	151.2	0.00	-2.64	-2.64
44	154.8	-0.07	-2.70	-2.77

2250+00, MSU St. 50

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.01	-0.06	-0.05
3	7.2	0.04	-0.12	-0.08
4	10.8	0.04	-0.18	-0.14
5	14.4	0.04	-0.25	-0.21
6	18.0	0.06	-0.31	-0.25
7	21.6	0.08	-0.37	-0.29
8	25.2	0.10	-0.43	-0.33
9	28.8	0.13	-0.49	-0.36
10	32.4	0.17	-0.55	-0.38
11	36.0	0.20	-0.61	-0.41
12	39.6	0.27	-0.68	-0.41
13	43.2	0.30	-0.74	-0.44
14	46.8	0.33	-0.80	-0.47
15	50.4	0.38	-0.86	-0.48
16	54.0	0.42	-0.92	-0.50
17	57.6	0.46	-0.98	-0.52
18	61.2	0.50	-1.04	-0.54
19	64.8	0.50	-1.11	-0.61
20	68.4	0.51	-1.17	-0.66
21	72.0	0.53	-1.23	-0.70
22	75.6	0.53	-1.29	-0.76
23	79.2	0.53	-1.35	-0.82
24	82.8	0.51	-1.41	-0.90
25	86.4	0.50	-1.47	-0.97
26	90.0	0.51	-1.53	-1.02
27	93.6	0.51	-1.60	-1.09
28	97.2	0.52	-1.66	-1.14
29	100.8	0.53	-1.72	-1.19
30	104.4	0.54	-1.78	-1.24
31	108.0	0.56	-1.84	-1.28
32	111.6	0.60	-1.90	-1.30
33	115.2	0.60	-1.96	-1.36
34	118.8	0.66	-2.03	-1.37
35	122.4	0.68	-2.09	-1.41
36	126.0	0.70	-2.15	-1.45
37	129.6	0.71	-2.21	-1.50
38	133.2	0.67	-2.27	-1.60
39	136.8	0.52	-2.33	-1.81
40	140.4	0.40	-2.39	-1.99
41	144.0	0.27	-2.46	-2.19
42	147.6	0.10	-2.52	-2.42
43	151.2	0.05	-2.58	-2.53
44	154.8	-0.01	-2.64	-2.65

Table 13ED. Coordinate System of the First Annual Post-construction Pavement Profile of East Bound Driving Lane.

2254+00, MSU St. 51

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.04	-0.06	-0.02
3	7.2	0.07	-0.11	-0.04
4	10.8	0.07	-0.17	-0.10
5	14.4	0.10	-0.22	-0.12
6	18.0	0.12	-0.28	-0.16
7	21.6	0.15	-0.33	-0.18
8	25.2	0.20	-0.39	-0.19
9	28.8	0.21	-0.45	-0.24
10	32.4	0.27	-0.50	-0.23
11	36.0	0.30	-0.56	-0.26
12	39.6	0.37	-0.61	-0.24
13	43.2	0.40	-0.67	-0.27
14	46.8	0.43	-0.73	-0.30
15	50.4	0.49	-0.78	-0.29
16	54.0	0.51	-0.84	-0.33
17	57.6	0.52	-0.89	-0.37
18	61.2	0.55	-0.95	-0.40
19	64.8	0.58	-1.00	-0.42
20	68.4	0.57	-1.06	-0.49
21	72.0	0.59	-1.12	-0.53
22	75.6	0.56	-1.17	-0.61
23	79.2	0.53	-1.23	-0.70
24	82.8	0.51	-1.28	-0.77
25	86.4	0.51	-1.34	-0.83
26	90.0	0.50	-1.40	-0.90
27	93.6	0.51	-1.45	-0.94
28	97.2	0.51	-1.51	-1.00
29	100.8	0.51	-1.56	-1.05
30	104.4	0.53	-1.62	-1.09
31	108.0	0.54	-1.67	-1.13
32	111.6	0.60	-1.73	-1.13
33	115.2	0.60	-1.79	-1.19
34	118.8	0.61	-1.84	-1.23
35	122.4	0.60	-1.90	-1.30
36	126.0	0.60	-1.95	-1.35
37	129.6	0.60	-2.01	-1.41
38	133.2	0.55	-2.07	-1.52
39	136.8	0.43	-2.12	-1.69
40	140.4	0.36	-2.18	-1.82
41	144.0	0.24	-2.23	-1.99
42	147.6	0.11	-2.29	-2.18
43	151.2	0.02	-2.34	-2.32
44	154.8	-0.10	-2.40	-2.50

2260+00, MSU St. 52

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.01	-0.08	-0.07
3	7.2	0.03	-0.15	-0.12
4	10.8	0.04	-0.23	-0.19
5	14.4	0.04	-0.30	-0.26
6	18.0	0.05	-0.38	-0.33
7	21.6	0.08	-0.45	-0.37
8	25.2	0.10	-0.53	-0.43
9	28.8	0.12	-0.60	-0.48
10	32.4	0.18	-0.68	-0.50
11	36.0	0.21	-0.75	-0.54
12	39.6	0.27	-0.83	-0.56
13	43.2	0.31	-0.90	-0.59
14	46.8	0.37	-0.98	-0.61
15	50.4	0.41	-1.05	-0.64
16	54.0	0.48	-1.13	-0.65
17	57.6	0.49	-1.21	-0.72
18	61.2	0.50	-1.28	-0.78
19	64.8	0.51	-1.36	-0.85
20	68.4	0.51	-1.43	-0.92
21	72.0	0.53	-1.51	-0.98
22	75.6	0.53	-1.58	-1.05
23	79.2	0.53	-1.66	-1.13
24	82.8	0.53	-1.73	-1.20
25	86.4	0.51	-1.81	-1.30
26	90.0	0.50	-1.88	-1.38
27	93.6	0.50	-1.96	-1.46
28	97.2	0.50	-2.03	-1.53
29	100.8	0.51	-2.11	-1.60
30	104.4	0.54	-2.19	-1.65
31	108.0	0.58	-2.26	-1.68
32	111.6	0.61	-2.34	-1.73
33	115.2	0.64	-2.41	-1.77
34	118.8	0.69	-2.49	-1.80
35	122.4	0.68	-2.56	-1.88
36	126.0	0.68	-2.64	-1.96
37	129.6	0.65	-2.71	-2.06
38	133.2	0.55	-2.79	-2.24
39	136.8	0.45	-2.86	-2.41
40	140.4	0.33	-2.94	-2.61
41	144.0	0.21	-3.01	-2.80
42	147.6	0.11	-3.09	-2.98
43	151.2	0.00	-3.16	-3.16
44	154.8	-0.10	-3.24	-3.34

Glendive Experimental Test Sectin, 1992

Table 1EP. Coordinates of the First Annual Post-construction Pavement Profile of East Bound Passing Lane

2130+00, MSU St. 27

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0	-0.04	-0.04
3	7.2	0.00	-0.08	-0.08
4	10.8	0.00	-0.12	-0.12
5	14.4	-0.03	-0.16	-0.19
6	18.0	-0.07	-0.20	-0.27
7	21.6	-0.07	-0.23	-0.30
8	25.2	-0.07	-0.27	-0.34
9	28.8	-0.05	-0.31	-0.36
10	32.4	-0.06	-0.35	-0.41
11	36.0	-0.07	-0.39	-0.46
12	39.6	-0.08	-0.43	-0.51
13	43.2	-0.07	-0.47	-0.54
14	46.8	-0.06	-0.51	-0.57
15	50.4	-0.06	-0.55	-0.61
16	54.0	-0.06	-0.59	-0.65
17	57.6	-0.08	-0.63	-0.71
18	61.2	-0.04	-0.66	-0.70
19	64.8	-0.03	-0.70	-0.73
20	68.4	-0.04	-0.74	-0.78
21	72.0	-0.03	-0.78	-0.81
22	75.6	0.02	-0.82	-0.80
23	79.2	0.02	-0.86	-0.84
24	82.8	0.03	-0.90	-0.87
25	86.4	0.04	-0.94	-0.90
26	90.0	0.05	-0.98	-0.93
27	93.6	0.04	-1.02	-0.98
28	97.2	0.03	-1.05	-1.02
29	100.8	0.03	-1.09	-1.06
30	104.4	0.04	-1.13	-1.10
31	108.0	0.02	-1.17	-1.15
32	111.6	0.01	-1.21	-1.20
33	115.2	-0.01	-1.25	-1.26
34	118.8	-0.01	-1.29	-1.29
35	122.4	-0.01	-1.33	-1.34
36	126.0	0.00	-1.37	-1.37
37	129.6	0.01	-1.41	-1.40
38	133.2	0.02	-1.45	-1.43
39	136.8	0.01	-1.48	-1.47
40	140.4	0.02	-1.52	-1.50
41	144.0	0.00	-1.56	-1.56
42	147.6	-0.03	-1.60	-1.63
43	151.2	-0.07	-1.64	-1.71
44	154.8	-0.10	-1.68	-1.78

2134+00, MSU St. 28

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.01	-0.04	-0.03
3	7.2	-0.02	-0.07	-0.09
4	10.8	-0.02	-0.11	-0.13
5	14.4	-0.04	-0.15	-0.19
6	18.0	-0.04	-0.18	-0.22
7	21.6	-0.03	-0.22	-0.25
8	25.2	-0.07	-0.25	-0.32
9	28.8	-0.05	-0.29	-0.34
10	32.4	-0.05	-0.33	-0.38
11	36.0	-0.06	-0.36	-0.42
12	39.6	-0.04	-0.40	-0.44
13	43.2	-0.07	-0.44	-0.51
14	46.8	-0.08	-0.47	-0.55
15	50.4	-0.08	-0.51	-0.59
16	54.0	-0.07	-0.54	-0.61
17	57.6	-0.08	-0.58	-0.66
18	61.2	-0.07	-0.62	-0.69
19	64.8	-0.07	-0.65	-0.72
20	68.4	-0.01	-0.69	-0.70
21	72.0	-0.08	-0.73	-0.81
22	75.6	-0.07	-0.76	-0.83
23	79.2	-0.03	-0.80	-0.83
24	82.8	-0.02	-0.83	-0.85
25	86.4	-0.02	-0.87	-0.89
26	90.0	-0.02	-0.91	-0.93
27	93.6	-0.02	-0.94	-0.96
28	97.2	-0.02	-0.98	-1.00
29	100.8	-0.02	-1.02	-1.04
30	104.4	-0.03	-1.05	-1.08
31	108.0	-0.04	-1.09	-1.13
32	111.6	-0.05	-1.12	-1.17
33	115.2	-0.09	-1.16	-1.25
34	118.8	-0.09	-1.20	-1.29
35	122.4	-0.10	-1.23	-1.33
36	126.0	-0.12	-1.27	-1.39
37	129.6	-0.12	-1.31	-1.43
38	133.2	-0.12	-1.34	-1.46
39	136.8	-0.12	-1.38	-1.50
40	140.4	-0.12	-1.41	-1.53
41	144.0	-0.12	-1.45	-1.57
42	147.6	-0.17	-1.49	-1.66
43	151.2	-0.18	-1.52	-1.70
44	154.8	-0.22	-1.56	-1.78

Glendive Experimental Test Sectin, 1992

Table 2EP. Coordinates of the First Annual Post-construction Pavement Profile of East Bound Passing Lane

2138+00, MSU St. 29

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0	-0.04	-0.04
3	7.2	-0.01	-0.08	-0.09
4	10.8	-0.05	-0.12	-0.17
5	14.4	-0.05	-0.16	-0.21
6	18.0	-0.05	-0.20	-0.25
7	21.6	-0.05	-0.24	-0.29
8	25.2	-0.03	-0.28	-0.31
9	28.8	-0.02	-0.32	-0.34
10	32.4	-0.05	-0.36	-0.41
11	36.0	-0.03	-0.40	-0.43
12	39.6	-0.03	-0.45	-0.48
13	43.2	-0.06	-0.49	-0.55
14	46.8	-0.05	-0.53	-0.58
15	50.4	-0.03	-0.57	-0.59
16	54.0	-0.01	-0.61	-0.62
17	57.6	-0.01	-0.65	-0.66
18	61.2	-0.01	-0.69	-0.70
19	64.8	0.00	-0.73	-0.73
20	68.4	0.01	-0.77	-0.76
21	72.0	0.03	-0.81	-0.78
22	75.6	0.04	-0.85	-0.81
23	79.2	0.05	-0.89	-0.84
24	82.8	0.07	-0.93	-0.86
25	86.4	0.09	-0.97	-0.89
26	90.0	0.08	-1.01	-0.93
27	93.6	0.08	-1.05	-0.98
28	97.2	0.09	-1.09	-1.00
29	100.8	0.09	-1.13	-1.05
30	104.4	0.09	-1.17	-1.09
31	108.0	0.09	-1.21	-1.12
32	111.6	0.06	-1.25	-1.19
33	115.2	0.05	-1.29	-1.24
34	118.8	0.05	-1.34	-1.29
35	122.4	0.03	-1.38	-1.35
36	126.0	0.05	-1.42	-1.37
37	129.6	0.05	-1.46	-1.41
38	133.2	0.05	-1.50	-1.45
39	136.8	0.05	-1.54	-1.49
40	140.4	0.09	-1.58	-1.49
41	144.0	0.06	-1.62	-1.56
42	147.6	0.02	-1.66	-1.64
43	151.2	0.00	-1.70	-1.70
44	154.8	-0.02	-1.74	-1.76

2144+00, MSU St. 30

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0	-0.04	-0.04
3	7.2	0.00	-0.09	-0.09
4	10.8	0.00	-0.13	-0.13
5	14.4	0.00	-0.18	-0.18
6	18.0	0.00	-0.22	-0.22
7	21.6	-0.01	-0.27	-0.28
8	25.2	-0.02	-0.31	-0.33
9	28.8	-0.01	-0.36	-0.37
10	32.4	-0.01	-0.40	-0.41
11	36.0	-0.02	-0.45	-0.47
12	39.6	-0.01	-0.49	-0.50
13	43.2	-0.01	-0.54	-0.55
14	46.8	0.00	-0.58	-0.58
15	50.4	0.00	-0.63	-0.63
16	54.0	0.02	-0.67	-0.65
17	57.6	0.02	-0.71	-0.69
18	61.2	0.04	-0.76	-0.72
19	64.8	0.06	-0.80	-0.74
20	68.4	0.09	-0.85	-0.76
21	72.0	0.10	-0.89	-0.79
22	75.6	0.12	-0.94	-0.82
23	79.2	0.13	-0.98	-0.85
24	82.8	0.15	-1.03	-0.88
25	86.4	0.18	-1.07	-0.89
26	90.0	0.13	-1.12	-0.99
27	93.6	0.15	-1.16	-1.01
28	97.2	0.15	-1.21	-1.06
29	100.8	0.12	-1.25	-1.13
30	104.4	0.12	-1.29	-1.17
31	108.0	0.12	-1.34	-1.22
32	111.6	0.11	-1.38	-1.27
33	115.2	0.10	-1.43	-1.33
34	118.8	0.10	-1.47	-1.37
35	122.4	0.10	-1.52	-1.42
36	126.0	0.11	-1.56	-1.45
37	129.6	0.15	-1.61	-1.46
38	133.2	0.16	-1.65	-1.49
39	136.8	0.18	-1.70	-1.52
40	140.4	0.12	-1.74	-1.62
41	144.0	0.10	-1.79	-1.69
42	147.6	0.19	-1.83	-1.64
43	151.2	0.05	-1.88	-1.83
44	154.8	0.01	-1.92	-1.91

Table 3EP. Coordinates of the First Annual Post-construction Pavement Profile of East Bound Passing Lane

2150+00, MSU St. 31

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0	-0.03	-0.03
3	7.2	0.00	-0.06	-0.06
4	10.8	0.00	-0.10	-0.10
5	14.4	0.00	-0.13	-0.13
6	18.0	0.01	-0.16	-0.16
7	21.6	0.00	-0.19	-0.19
8	25.2	0.01	-0.22	-0.22
9	28.8	0.01	-0.26	-0.25
10	32.4	0.01	-0.29	-0.28
11	36.0	0.02	-0.32	-0.30
12	39.6	0.02	-0.35	-0.33
13	43.2	0.01	-0.39	-0.38
14	46.8	0.02	-0.42	-0.40
15	50.4	0.05	-0.45	-0.40
16	54.0	0.06	-0.48	-0.42
17	57.6	0.06	-0.51	-0.45
18	61.2	0.08	-0.55	-0.47
19	64.8	0.10	-0.58	-0.48
20	68.4	0.10	-0.61	-0.51
21	72.0	0.11	-0.64	-0.53
22	75.6	0.12	-0.67	-0.55
23	79.2	0.12	-0.71	-0.59
24	82.8	0.14	-0.74	-0.60
25	86.4	0.16	-0.77	-0.61
26	90.0	0.15	-0.80	-0.65
27	93.6	0.15	-0.83	-0.68
28	97.2	0.15	-0.87	-0.72
29	100.8	0.14	-0.90	-0.76
30	104.4	0.12	-0.93	-0.81
31	108.0	0.11	-0.96	-0.85
32	111.6	0.11	-0.99	-0.88
33	115.2	0.10	-1.03	-0.93
34	118.8	0.10	-1.06	-0.96
35	122.4	0.10	-1.09	-0.99
36	126.0	0.10	-1.12	-1.02
37	129.6	0.10	-1.16	-1.06
38	133.2	0.10	-1.19	-1.09
39	136.8	0.10	-1.22	-1.12
40	140.4	0.08	-1.25	-1.17
41	144.0	0.05	-1.28	-1.23
42	147.6	0.02	-1.32	-1.30
43	151.2	0.10	-1.35	-1.25
44	154.8	0.00	-1.38	-1.38

2154+00, MSU St. 32

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0	-0.03	-0.03
3	7.2	-0.01	-0.07	-0.08
4	10.8	-0.01	-0.10	-0.11
5	14.4	-0.02	-0.13	-0.15
6	18.0	-0.05	-0.17	-0.22
7	21.6	-0.03	-0.20	-0.23
8	25.2	-0.02	-0.23	-0.25
9	28.8	-0.03	-0.27	-0.30
10	32.4	-0.03	-0.30	-0.33
11	36.0	-0.02	-0.33	-0.35
12	39.6	-0.02	-0.37	-0.39
13	43.2	-0.02	-0.40	-0.42
14	46.8	0.00	-0.44	-0.44
15	50.4	0.01	-0.47	-0.46
16	54.0	0.03	-0.50	-0.48
17	57.6	0.03	-0.54	-0.51
18	61.2	0.05	-0.57	-0.52
19	64.8	0.05	-0.60	-0.55
20	68.4	0.05	-0.64	-0.59
21	72.0	0.08	-0.67	-0.59
22	75.6	0.08	-0.70	-0.62
23	79.2	0.09	-0.74	-0.65
24	82.8	0.12	-0.77	-0.65
25	86.4	0.09	-0.80	-0.71
26	90.0	0.09	-0.84	-0.75
27	93.6	0.11	-0.87	-0.76
28	97.2	0.11	-0.90	-0.79
29	100.8	0.12	-0.94	-0.82
30	104.4	0.12	-0.97	-0.85
31	108.0	0.10	-1.00	-0.90
32	111.6	0.08	-1.04	-0.96
33	115.2	0.08	-1.07	-0.99
34	118.8	0.06	-1.11	-1.05
35	122.4	0.04	-1.14	-1.10
36	126.0	0.05	-1.17	-1.12
37	129.6	0.05	-1.21	-1.16
38	133.2	0.05	-1.24	-1.19
39	136.8	0.07	-1.27	-1.20
40	140.4	0.04	-1.31	-1.27
41	144.0	0.03	-1.34	-1.31
42	147.6	0.02	-1.37	-1.35
43	151.2	0.02	-1.41	-1.39
44	154.8	0.06	-1.44	-1.38

Glendive Experimental Test Sectin, 1992

Table 4EP. Coordinates of the First Annual Post-construction Pavement Profile of East Bound Passing Lane

2160+00, MSU St. 33

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0	-0.04	-0.04
3	7.2	0.00	-0.08	-0.08
4	10.8	-0.01	-0.11	-0.12
5	14.4	-0.02	-0.15	-0.17
6	18.0	-0.01	-0.19	-0.20
7	21.6	-0.02	-0.23	-0.25
8	25.2	-0.02	-0.26	-0.28
9	28.8	-0.01	-0.30	-0.31
10	32.4	-0.02	-0.34	-0.36
11	36.0	-0.01	-0.38	-0.39
12	39.6	-0.02	-0.41	-0.43
13	43.2	-0.02	-0.45	-0.47
14	46.8	-0.01	-0.49	-0.50
15	50.4	-0.01	-0.53	-0.54
16	54.0	-0.01	-0.57	-0.58
17	57.6	-0.01	-0.60	-0.61
18	61.2	-0.01	-0.64	-0.65
19	64.8	0.00	-0.68	-0.68
20	68.4	0.01	-0.72	-0.71
21	72.0	0.02	-0.75	-0.73
22	75.6	0.05	-0.79	-0.74
23	79.2	0.03	-0.83	-0.80
24	82.8	0.02	-0.87	-0.85
25	86.4	0.02	-0.90	-0.88
26	90.0	0.00	-0.94	-0.94
27	93.6	0.00	-0.98	-0.98
28	97.2	-0.01	-1.02	-1.02
29	100.8	-0.02	-1.05	-1.07
30	104.4	-0.02	-1.09	-1.11
31	108.0	-0.03	-1.13	-1.16
32	111.6	-0.08	-1.17	-1.25
33	115.2	-0.08	-1.21	-1.29
34	118.8	-0.10	-1.24	-1.34
35	122.4	-0.10	-1.28	-1.38
36	126.0	-0.10	-1.32	-1.42
37	129.6	-0.10	-1.36	-1.46
38	133.2	-0.10	-1.39	-1.49
39	136.8	-0.10	-1.43	-1.53
40	140.4	-0.10	-1.47	-1.57
41	144.0	-0.12	-1.51	-1.63
42	147.6	-0.14	-1.54	-1.68
43	151.2	-0.17	-1.58	-1.75
44	154.8	-0.20	-1.62	-1.82

2164+00, MSU St. 34

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.02	-0.04	-0.02
3	7.2	0.03	-0.08	-0.05
4	10.8	0.03	-0.11	-0.08
5	14.4	0.03	-0.15	-0.12
6	18.0	0.03	-0.19	-0.16
7	21.6	0.03	-0.23	-0.20
8	25.2	0.03	-0.26	-0.23
9	28.8	0.03	-0.30	-0.27
10	32.4	0.02	-0.34	-0.32
11	36.0	0.00	-0.38	-0.38
12	39.6	-0.02	-0.41	-0.43
13	43.2	-0.02	-0.45	-0.47
14	46.8	-0.03	-0.49	-0.52
15	50.4	-0.02	-0.53	-0.55
16	54.0	0.01	-0.57	-0.56
17	57.6	0.04	-0.60	-0.56
18	61.2	0.05	-0.64	-0.59
19	64.8	0.06	-0.68	-0.62
20	68.4	0.06	-0.72	-0.66
21	72.0	0.12	-0.75	-0.63
22	75.6	0.10	-0.79	-0.69
23	79.2	0.10	-0.83	-0.73
24	82.8	0.11	-0.87	-0.76
25	86.4	0.12	-0.90	-0.78
26	90.0	0.13	-0.94	-0.81
27	93.6	0.12	-0.98	-0.86
28	97.2	0.07	-1.02	-0.95
29	100.8	0.06	-1.05	-0.99
30	104.4	0.05	-1.09	-1.04
31	108.0	0.04	-1.13	-1.09
32	111.6	0.01	-1.17	-1.16
33	115.2	0.00	-1.21	-1.21
34	118.8	-0.03	-1.24	-1.27
35	122.4	-0.02	-1.28	-1.30
36	126.0	-0.04	-1.32	-1.36
37	129.6	-0.04	-1.36	-1.40
38	133.2	-0.03	-1.39	-1.42
39	136.8	-0.04	-1.43	-1.47
40	140.4	-0.01	-1.47	-1.48
41	144.0	-0.03	-1.51	-1.54
42	147.6	-0.07	-1.54	-1.61
43	151.2	-0.10	-1.58	-1.68
44	154.8	-0.15	-1.62	-1.77

Glendive Experimental Test Sectin, 1992

Table 5EP. Coordinates of the First Annual Post-construction Pavement Profile of East Bound Passing Lane

2170+00, MSU St. 35

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0	-0.04	-0.04
3	7.2	0.01	-0.08	-0.07
4	10.8	0.01	-0.11	-0.10
5	14.4	0.03	-0.15	-0.12
6	18.0	0.04	-0.19	-0.15
7	21.6	0.03	-0.23	-0.20
8	25.2	0.04	-0.26	-0.22
9	28.8	0.04	-0.30	-0.26
10	32.4	0.05	-0.34	-0.29
11	36.0	0.05	-0.38	-0.33
12	39.6	0.06	-0.41	-0.35
13	43.2	0.03	-0.45	-0.42
14	46.8	0.09	-0.49	-0.40
15	50.4	0.09	-0.53	-0.44
16	54.0	0.09	-0.57	-0.48
17	57.6	0.11	-0.60	-0.49
18	61.2	0.15	-0.64	-0.49
19	64.8	0.18	-0.68	-0.50
20	68.4	0.18	-0.72	-0.54
21	72.0	0.19	-0.75	-0.56
22	75.6	0.20	-0.79	-0.59
23	79.2	0.21	-0.83	-0.62
24	82.8	0.21	-0.87	-0.66
25	86.4	0.22	-0.90	-0.68
26	90.0	0.22	-0.94	-0.72
27	93.6	0.23	-0.98	-0.75
28	97.2	0.22	-1.02	-0.80
29	100.8	0.22	-1.05	-0.83
30	104.4	0.21	-1.09	-0.88
31	108.0	0.22	-1.13	-0.91
32	111.6	0.22	-1.17	-0.95
33	115.2	0.22	-1.21	-0.99
34	118.8	0.21	-1.24	-1.03
35	122.4	0.22	-1.28	-1.06
36	126.0	0.23	-1.32	-1.09
37	129.6	0.25	-1.36	-1.11
38	133.2	0.27	-1.39	-1.12
39	136.8	0.29	-1.43	-1.14
40	140.4	0.28	-1.47	-1.19
41	144.0	0.23	-1.51	-1.28
42	147.6	0.20	-1.54	-1.34
43	151.2	0.18	-1.58	-1.40
44	154.8	0.15	-1.62	-1.47

2176+00, MSU St. 36

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.01	-0.04	-0.03
3	7.2	0.01	-0.09	-0.08
4	10.8	0.02	-0.13	-0.11
5	14.4	0.02	-0.17	-0.15
6	18.0	0.01	-0.22	-0.21
7	21.6	0.02	-0.26	-0.24
8	25.2	0.03	-0.30	-0.27
9	28.8	0.04	-0.35	-0.31
10	32.4	0.04	-0.39	-0.35
11	36.0	0.05	-0.43	-0.38
12	39.6	0.07	-0.48	-0.41
13	43.2	0.07	-0.52	-0.45
14	46.8	0.08	-0.56	-0.48
15	50.4	0.09	-0.61	-0.52
16	54.0	0.11	-0.65	-0.54
17	57.6	0.11	-0.69	-0.58
18	61.2	0.12	-0.74	-0.62
19	64.8	0.14	-0.78	-0.64
20	68.4	0.15	-0.82	-0.67
21	72.0	0.17	-0.87	-0.70
22	75.6	0.20	-0.91	-0.71
23	79.2	0.19	-0.95	-0.76
24	82.8	0.20	-0.99	-0.79
25	86.4	0.20	-1.04	-0.84
26	90.0	0.21	-1.08	-0.87
27	93.6	0.22	-1.12	-0.90
28	97.2	0.21	-1.17	-0.96
29	100.8	0.20	-1.21	-1.01
30	104.4	0.21	-1.25	-1.04
31	108.0	0.21	-1.30	-1.09
32	111.6	0.20	-1.34	-1.14
33	115.2	0.21	-1.38	-1.17
34	118.8	0.20	-1.43	-1.23
35	122.4	0.20	-1.47	-1.27
36	126.0	0.20	-1.51	-1.31
37	129.6	0.21	-1.56	-1.35
38	133.2	0.21	-1.60	-1.39
39	136.8	0.20	-1.64	-1.44
40	140.4	0.18	-1.69	-1.51
41	144.0	0.17	-1.73	-1.56
42	147.6	0.15	-1.77	-1.62
43	151.2	0.14	-1.82	-1.68
44	154.8	0.10	-1.86	-1.76

Table 6EP. Coordinates of the First Annual Post-construction Pavement Profile of East Bound Passing Lane

2180+00, MSU St. 37

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0	-0.04	-0.04
3	7.2	0.01	-0.08	-0.07
4	10.8	0.00	-0.12	-0.12
5	14.4	0.00	-0.16	-0.16
6	18.0	0.10	-0.20	-0.10
7	21.6	0.00	-0.24	-0.24
8	25.2	-0.01	-0.28	-0.29
9	28.8	0.01	-0.32	-0.31
10	32.4	0.01	-0.36	-0.35
11	36.0	0.01	-0.40	-0.39
12	39.6	0.01	-0.45	-0.44
13	43.2	0.00	-0.49	-0.49
14	46.8	0.01	-0.53	-0.52
15	50.4	0.01	-0.57	-0.56
16	54.0	0.01	-0.61	-0.60
17	57.6	0.02	-0.65	-0.63
18	61.2	0.03	-0.69	-0.66
19	64.8	0.04	-0.73	-0.69
20	68.4	0.04	-0.77	-0.73
21	72.0	0.04	-0.81	-0.77
22	75.6	0.07	-0.85	-0.78
23	79.2	0.07	-0.89	-0.82
24	82.8	0.07	-0.93	-0.86
25	86.4	0.09	-0.97	-0.88
26	90.0	0.08	-1.01	-0.93
27	93.6	0.07	-1.05	-0.98
28	97.2	0.07	-1.09	-1.02
29	100.8	0.06	-1.13	-1.07
30	104.4	0.06	-1.17	-1.11
31	108.0	0.06	-1.21	-1.15
32	111.6	0.03	-1.25	-1.23
33	115.2	0.01	-1.29	-1.28
34	118.8	0.02	-1.34	-1.32
35	122.4	0.00	-1.38	-1.38
36	126.0	-0.01	-1.42	-1.43
37	129.6	-0.02	-1.46	-1.48
38	133.2	0.00	-1.50	-1.50
39	136.8	0.01	-1.54	-1.53
40	140.4	0.01	-1.58	-1.57
41	144.0	-0.02	-1.62	-1.64
42	147.6	-0.07	-1.66	-1.73
43	151.2	-0.09	-1.70	-1.79
44	154.8	-0.11	-1.74	-1.85

2184+00, MSU St. 38

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.01	-0.05	-0.04
3	7.2	0.00	-0.10	-0.10
4	10.8	-0.01	-0.15	-0.16
5	14.4	-0.02	-0.20	-0.22
6	18.0	-0.01	-0.25	-0.26
7	21.6	-0.01	-0.30	-0.31
8	25.2	-0.01	-0.35	-0.36
9	28.8	0.00	-0.40	-0.40
10	32.4	0.00	-0.45	-0.45
11	36.0	0.00	-0.50	-0.50
12	39.6	-0.01	-0.55	-0.56
13	43.2	0.00	-0.60	-0.60
14	46.8	0.00	-0.65	-0.65
15	50.4	-0.01	-0.70	-0.71
16	54.0	-0.01	-0.75	-0.76
17	57.6	0.01	-0.80	-0.79
18	61.2	0.04	-0.85	-0.81
19	64.8	0.03	-0.90	-0.87
20	68.4	0.02	-0.95	-0.93
21	72.0	0.04	-1.00	-0.96
22	75.6	0.07	-1.05	-0.98
23	79.2	0.07	-1.11	-1.04
24	82.8	0.08	-1.16	-1.08
25	86.4	0.09	-1.21	-1.12
26	90.0	0.10	-1.26	-1.16
27	93.6	0.10	-1.31	-1.21
28	97.2	0.10	-1.36	-1.26
29	100.8	0.09	-1.41	-1.32
30	104.4	0.08	-1.46	-1.38
31	108.0	0.07	-1.51	-1.44
32	111.6	0.06	-1.56	-1.50
33	115.2	0.06	-1.61	-1.55
34	118.8	0.05	-1.66	-1.61
35	122.4	0.05	-1.71	-1.66
36	126.0	0.05	-1.76	-1.71
37	129.6	0.07	-1.81	-1.74
38	133.2	0.08	-1.86	-1.78
39	136.8	0.08	-1.91	-1.83
40	140.4	0.06	-1.96	-1.90
41	144.0	0.01	-2.01	-2.00
42	147.6	-0.01	-2.06	-2.07
43	151.2	-0.04	-2.11	-2.15
44	154.8	-0.08	-2.16	-2.24

Table 7EP. Coordinates of the First Annual Post-construction Pavement Profile of East Bound Passing Lane

2188+00, MSU St. 39

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	-0.01	-0.06	-0.07
3	7.2	-0.02	-0.12	-0.14
4	10.8	-0.03	-0.18	-0.21
5	14.4	-0.03	-0.23	-0.26
6	18.0	-0.03	-0.29	-0.32
7	21.6	-0.03	-0.35	-0.38
8	25.2	-0.03	-0.41	-0.44
9	28.8	-0.02	-0.47	-0.49
10	32.4	-0.03	-0.53	-0.56
11	36.0	-0.03	-0.59	-0.62
12	39.6	-0.05	-0.64	-0.69
13	43.2	-0.06	-0.70	-0.76
14	46.8	-0.07	-0.76	-0.83
15	50.4	-0.05	-0.82	-0.87
16	54.0	-0.04	-0.88	-0.92
17	57.6	-0.04	-0.94	-0.98
18	61.2	-0.03	-1.00	-1.03
19	64.8	-0.03	-1.05	-1.08
20	68.4	-0.03	-1.11	-1.14
21	72.0	-0.02	-1.17	-1.19
22	75.6	0.01	-1.23	-1.22
23	79.2	0.03	-1.29	-1.26
24	82.8	0.05	-1.35	-1.30
25	86.4	0.08	-1.41	-1.33
26	90.0	0.09	-1.47	-1.38
27	93.6	0.09	-1.52	-1.43
28	97.2	0.07	-1.58	-1.51
29	100.8	0.06	-1.64	-1.58
30	104.4	0.06	-1.70	-1.64
31	108.0	0.01	-1.76	-1.75
32	111.6	-0.01	-1.82	-1.83
33	115.2	-0.01	-1.88	-1.89
34	118.8	-0.02	-1.93	-1.95
35	122.4	-0.03	-1.99	-2.02
36	126.0	-0.04	-2.05	-2.09
37	129.6	-0.02	-2.11	-2.13
38	133.2	-0.02	-2.17	-2.19
39	136.8	-0.01	-2.23	-2.24
40	140.4	-0.02	-2.29	-2.31
41	144.0	-0.05	-2.34	-2.39
42	147.6	-0.09	-2.40	-2.49
43	151.2	-0.11	-2.46	-2.57
44	154.8	-0.13	-2.52	-2.65

2192+00, MSU St. 40

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.01	-0.06	-0.05
3	7.2	0.01	-0.12	-0.11
4	10.8	0.03	-0.18	-0.15
5	14.4	0.03	-0.23	-0.20
6	18.0	0.01	-0.29	-0.28
7	21.6	0.01	-0.35	-0.35
8	25.2	0.00	-0.41	-0.41
9	28.8	0.01	-0.47	-0.46
10	32.4	0.00	-0.53	-0.53
11	36.0	0.00	-0.59	-0.59
12	39.6	0.00	-0.64	-0.64
13	43.2	0.00	-0.70	-0.70
14	46.8	-0.02	-0.76	-0.78
15	50.4	-0.04	-0.82	-0.86
16	54.0	-0.05	-0.88	-0.93
17	57.6	-0.05	-0.94	-0.99
18	61.2	-0.05	-1.00	-1.05
19	64.8	-0.02	-1.05	-1.07
20	68.4	-0.03	-1.11	-1.14
21	72.0	-0.04	-1.17	-1.21
22	75.6	-0.03	-1.23	-1.26
23	79.2	0.01	-1.29	-1.28
24	82.8	-0.01	-1.35	-1.36
25	86.4	0.00	-1.41	-1.41
26	90.0	0.01	-1.47	-1.46
27	93.6	0.03	-1.52	-1.49
28	97.2	0.04	-1.58	-1.54
29	100.8	0.06	-1.64	-1.59
30	104.4	0.03	-1.70	-1.67
31	108.0	0.02	-1.76	-1.74
32	111.6	0.00	-1.82	-1.82
33	115.2	-0.05	-1.88	-1.93
34	118.8	-0.06	-1.93	-1.99
35	122.4	-0.07	-1.99	-2.06
36	126.0	-0.09	-2.05	-2.14
37	129.6	-0.12	-2.11	-2.23
38	133.2	-0.15	-2.17	-2.32
39	136.8	-0.15	-2.23	-2.38
40	140.4	-0.15	-2.29	-2.44
41	144.0	-0.17	-2.34	-2.51
42	147.6	-0.17	-2.40	-2.57
43	151.2	-0.16	-2.46	-2.62
44	154.8	-0.17	-2.52	-2.69

Glendive Experimental Test Sectin, 1992

Table 8EP. Coordinates of the First Annual Post-construction Pavement Profile of East Bound Passing Lane

2196+00, MSU St. 41

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0	-0.06	-0.06
3	7.2	0.00	-0.12	-0.12
4	10.8	-0.01	-0.18	-0.19
5	14.4	-0.01	-0.25	-0.26
6	18.0	-0.02	-0.31	-0.33
7	21.6	-0.01	-0.37	-0.38
8	25.2	0.00	-0.43	-0.43
9	28.8	0.00	-0.49	-0.49
10	32.4	0.00	-0.55	-0.55
11	36.0	-0.02	-0.61	-0.63
12	39.6	-0.01	-0.68	-0.68
13	43.2	0.00	-0.74	-0.74
14	46.8	0.00	-0.80	-0.80
15	50.4	0.02	-0.86	-0.84
16	54.0	0.03	-0.92	-0.89
17	57.6	0.05	-0.98	-0.93
18	61.2	0.05	-1.04	-0.99
19	64.8	0.06	-1.11	-1.05
20	68.4	0.06	-1.17	-1.11
21	72.0	0.09	-1.23	-1.14
22	75.6	0.11	-1.29	-1.18
23	79.2	0.11	-1.35	-1.24
24	82.8	0.12	-1.41	-1.29
25	86.4	0.15	-1.47	-1.32
26	90.0	0.15	-1.53	-1.38
27	93.6	0.15	-1.60	-1.45
28	97.2	0.17	-1.66	-1.49
29	100.8	0.15	-1.72	-1.57
30	104.4	0.15	-1.78	-1.63
31	108.0	0.15	-1.84	-1.69
32	111.6	0.14	-1.90	-1.76
33	115.2	0.12	-1.96	-1.84
34	118.8	0.12	-2.03	-1.91
35	122.4	0.12	-2.09	-1.97
36	126.0	0.12	-2.15	-2.03
37	129.6	0.12	-2.21	-2.09
38	133.2	0.11	-2.27	-2.16
39	136.8	0.12	-2.33	-2.21
40	140.4	0.11	-2.39	-2.28
41	144.0	0.08	-2.46	-2.38
42	147.6	0.05	-2.52	-2.47
43	151.2	0.02	-2.58	-2.56
44	154.8	0.01	-2.64	-2.63

2200+00, MSU St. 42

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.02	-0.06	-0.04
3	7.2	0.02	-0.11	-0.09
4	10.8	0.02	-0.17	-0.15
5	14.4	0.02	-0.23	-0.21
6	18.0	0.02	-0.29	-0.27
7	21.6	0.03	-0.34	-0.32
8	25.2	0.03	-0.40	-0.38
9	28.8	0.05	-0.46	-0.41
10	32.4	0.05	-0.51	-0.46
11	36.0	0.03	-0.57	-0.54
12	39.6	0.03	-0.63	-0.60
13	43.2	0.03	-0.69	-0.66
14	46.8	0.04	-0.74	-0.70
15	50.4	0.05	-0.80	-0.75
16	54.0	0.06	-0.86	-0.80
17	57.6	0.07	-0.92	-0.85
18	61.2	0.09	-0.97	-0.88
19	64.8	0.10	-1.03	-0.93
20	68.4	0.10	-1.09	-0.99
21	72.0	0.12	-1.14	-1.02
22	75.6	0.13	-1.20	-1.07
23	79.2	0.15	-1.26	-1.11
24	82.8	0.16	-1.32	-1.16
25	86.4	0.15	-1.37	-1.22
26	90.0	0.14	-1.43	-1.29
27	93.6	0.13	-1.49	-1.36
28	97.2	0.12	-1.54	-1.42
29	100.8	0.10	-1.60	-1.50
30	104.4	0.11	-1.66	-1.55
31	108.0	0.09	-1.72	-1.63
32	111.6	0.06	-1.77	-1.71
33	115.2	0.06	-1.83	-1.77
34	118.8	0.06	-1.89	-1.83
35	122.4	0.04	-1.95	-1.91
36	126.0	0.04	-2.00	-1.96
37	129.6	0.05	-2.06	-2.01
38	133.2	0.05	-2.12	-2.07
39	136.8	0.09	-2.17	-2.08
40	140.4	0.08	-2.23	-2.15
41	144.0	0.05	-2.29	-2.24
42	147.6	0.02	-2.35	-2.33
43	151.2	0.01	-2.40	-2.39
44	154.8	0.00	-2.46	-2.46

Table 9EP. Coordinates of the First Annual Post-construction Pavement Profile of East Bound Passing Lane

2208+00, MSU St. 43

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.02	-0.06	-0.04
3	7.2	0.01	-0.12	-0.11
4	10.8	0.00	-0.18	-0.18
5	14.4	-0.01	-0.23	-0.24
6	18.0	-0.02	-0.29	-0.31
7	21.6	-0.03	-0.35	-0.38
8	25.2	-0.02	-0.41	-0.43
9	28.8	-0.02	-0.47	-0.49
10	32.4	-0.03	-0.53	-0.56
11	36.0	-0.05	-0.59	-0.64
12	39.6	-0.05	-0.64	-0.69
13	43.2	-0.06	-0.70	-0.76
14	46.8	-0.08	-0.76	-0.84
15	50.4	-0.07	-0.82	-0.89
16	54.0	-0.07	-0.88	-0.95
17	57.6	-0.08	-0.94	-1.02
18	61.2	-0.06	-1.00	-1.06
19	64.8	-0.05	-1.05	-1.10
20	68.4	-0.07	-1.11	-1.18
21	72.0	-0.08	-1.17	-1.25
22	75.6	-0.08	-1.23	-1.31
23	79.2	-0.09	-1.29	-1.37
24	82.8	-0.09	-1.35	-1.44
25	86.4	-0.08	-1.41	-1.49
26	90.0	-0.09	-1.47	-1.55
27	93.6	-0.10	-1.52	-1.62
28	97.2	-0.10	-1.58	-1.68
29	100.8	-0.08	-1.64	-1.72
30	104.4	-0.08	-1.70	-1.78
31	108.0	-0.09	-1.76	-1.85
32	111.6	-0.10	-1.82	-1.92
33	115.2	-0.10	-1.88	-1.98
34	118.8	-0.12	-1.93	-2.05
35	122.4	-0.12	-1.99	-2.11
36	126.0	-0.13	-2.05	-2.18
37	129.6	-0.14	-2.11	-2.25
38	133.2	-0.18	-2.17	-2.35
39	136.8	-0.18	-2.23	-2.41
40	140.4	-0.15	-2.29	-2.44
41	144.0	-0.20	-2.34	-2.54
42	147.6	-0.22	-2.40	-2.62
43	151.2	-0.25	-2.46	-2.71
44	154.8	-0.30	-2.52	-2.82

2214+00, MSU St. 44

Point	Pavement Width (X)	Profilograph Coordinates	Profilcgraph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.03	-0.06	-0.03
3	7.2	0.01	-0.12	-0.11
4	10.8	0.01	-0.18	-0.17
5	14.4	0.03	-0.23	-0.20
6	18.0	0.01	-0.29	-0.28
7	21.6	0.03	-0.35	-0.32
8	25.2	0.02	-0.41	-0.39
9	28.8	0.01	-0.47	-0.46
10	32.4	0.00	-0.53	-0.53
11	36.0	-0.01	-0.59	-0.60
12	39.6	-0.01	-0.64	-0.65
13	43.2	-0.01	-0.70	-0.71
14	46.8	0.01	-0.76	-0.75
15	50.4	0.02	-0.82	-0.80
16	54.0	0.03	-0.88	-0.85
17	57.6	0.04	-0.94	-0.90
18	61.2	0.05	-1.00	-0.95
19	64.8	0.05	-1.05	-1.00
20	68.4	0.07	-1.11	-1.04
21	72.0	0.08	-1.17	-1.09
22	75.6	0.07	-1.23	-1.16
23	79.2	0.08	-1.29	-1.21
24	82.8	0.11	-1.35	-1.24
25	86.4	0.08	-1.41	-1.33
26	90.0	0.08	-1.47	-1.39
27	93.6	0.07	-1.52	-1.45
28	97.2	0.06	-1.58	-1.52
29	100.8	0.05	-1.64	-1.59
30	104.4	0.04	-1.70	-1.66
31	108.0	0.04	-1.76	-1.72
32	111.6	0.03	-1.82	-1.79
33	115.2	0.02	-1.88	-1.86
34	118.8	-0.01	-1.93	-1.94
35	122.4	-0.02	-1.99	-2.01
36	126.0	0.01	-2.05	-2.04
37	129.6	-0.02	-2.11	-2.13
38	133.2	-0.03	-2.17	-2.20
39	136.8	-0.06	-2.23	-2.29
40	140.4	-0.09	-2.29	-2.38
41	144.0	-0.14	-2.34	-2.48
42	147.6	-0.15	-2.40	-2.55
43	151.2	-0.19	-2.46	-2.65
44	154.8	-0.14	-2.52	-2.66

Table 10EP. Coordinates of the First Annual Post-construction Pavement Profile of East Bound Passing Lane

2220+00, MSU St. 45

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0	-0.06	-0.06
3	7.2	0.01	-0.12	-0.11
4	10.8	0.01	-0.18	-0.17
5	14.4	0.01	-0.25	-0.24
6	18.0	0.02	-0.31	-0.29
7	21.6	0.04	-0.37	-0.33
8	25.2	0.05	-0.43	-0.38
9	28.8	0.04	-0.49	-0.45
10	32.4	0.06	-0.55	-0.49
11	36.0	0.05	-0.61	-0.56
12	39.6	0.07	-0.68	-0.61
13	43.2	0.08	-0.74	-0.66
14	46.8	0.08	-0.80	-0.72
15	50.4	0.10	-0.86	-0.76
16	54.0	0.10	-0.92	-0.82
17	57.6	0.10	-0.98	-0.88
18	61.2	0.11	-1.04	-0.93
19	64.8	0.12	-1.11	-0.99
20	68.4	0.13	-1.17	-1.04
21	72.0	0.05	-1.23	-1.18
22	75.6	0.07	-1.29	-1.22
23	79.2	0.08	-1.35	-1.27
24	82.8	0.09	-1.41	-1.32
25	86.4	0.08	-1.47	-1.39
26	90.0	0.08	-1.53	-1.45
27	93.6	0.08	-1.60	-1.52
28	97.2	0.08	-1.66	-1.58
29	100.8	0.07	-1.72	-1.65
30	104.4	0.07	-1.78	-1.71
31	108.0	0.06	-1.84	-1.78
32	111.6	0.05	-1.90	-1.85
33	115.2	0.04	-1.96	-1.92
34	118.8	0.02	-2.03	-2.01
35	122.4	0.01	-2.09	-2.08
36	126.0	0.01	-2.15	-2.14
37	129.6	0.01	-2.21	-2.20
38	133.2	0.01	-2.27	-2.26
39	136.8	0.01	-2.33	-2.32
40	140.4	0.09	-2.39	-2.30
41	144.0	0.06	-2.46	-2.40
42	147.6	0.05	-2.52	-2.47
43	151.2	0.02	-2.58	-2.56
44	154.8	0.00	-2.64	-2.64

2226+00, MSU St. 46

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.02	-0.07	-0.05
3	7.2	0.03	-0.13	-0.10
4	10.8	0.01	-0.20	-0.19
5	14.4	0.01	-0.27	-0.26
6	18.0	0.02	-0.33	-0.31
7	21.6	0.00	-0.40	-0.40
8	25.2	0.01	-0.47	-0.46
9	28.8	0.02	-0.54	-0.52
10	32.4	0.02	-0.60	-0.58
11	36.0	0.02	-0.67	-0.65
12	39.6	0.02	-0.74	-0.72
13	43.2	0.03	-0.80	-0.77
14	46.8	0.03	-0.87	-0.84
15	50.4	0.03	-0.94	-0.91
16	54.0	0.02	-1.00	-0.98
17	57.6	0.05	-1.07	-1.02
18	61.2	0.08	-1.14	-1.06
19	64.8	0.10	-1.21	-1.11
20	68.4	0.10	-1.27	-1.17
21	72.0	0.10	-1.34	-1.24
22	75.6	0.14	-1.41	-1.27
23	79.2	0.14	-1.47	-1.33
24	82.8	0.16	-1.54	-1.38
25	86.4	0.18	-1.61	-1.43
26	90.0	0.18	-1.67	-1.49
27	93.6	0.19	-1.74	-1.56
28	97.2	0.17	-1.81	-1.64
29	100.8	0.17	-1.88	-1.71
30	104.4	0.18	-1.94	-1.76
31	108.0	0.18	-2.01	-1.83
32	111.6	0.14	-2.08	-1.94
33	115.2	0.13	-2.14	-2.01
34	118.8	0.12	-2.21	-2.09
35	122.4	0.11	-2.28	-2.17
36	126.0	0.10	-2.34	-2.24
37	129.6	0.10	-2.41	-2.31
38	133.2	0.10	-2.48	-2.38
39	136.8	0.10	-2.55	-2.45
40	140.4	0.10	-2.61	-2.51
41	144.0	0.06	-2.68	-2.62
42	147.6	0.06	-2.75	-2.69
43	151.2	0.04	-2.81	-2.77
44	154.8	0.03	-2.88	-2.85

Glendive Experimental Test Sectin, 1992

Table 11EP. Coordinates of the First Annual Post-construction Pavement Profile of East Bound Passing Lane

2232+00, MSU St. 47

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.01	-0.07	-0.06
3	7.2	0.03	-0.14	-0.11
4	10.8	0.03	-0.21	-0.18
5	14.4	0.04	-0.28	-0.24
6	18.0	0.08	-0.35	-0.27
7	21.6	0.08	-0.42	-0.34
8	25.2	0.08	-0.49	-0.41
9	28.8	0.09	-0.56	-0.47
10	32.4	0.09	-0.63	-0.54
11	36.0	0.10	-0.70	-0.60
12	39.6	0.10	-0.77	-0.67
13	43.2	0.12	-0.84	-0.72
14	46.8	0.14	-0.91	-0.77
15	50.4	0.18	-0.98	-0.80
16	54.0	0.20	-1.05	-0.85
17	57.6	0.20	-1.12	-0.92
18	61.2	0.23	-1.19	-0.96
19	64.8	0.28	-1.26	-0.98
20	68.4	0.29	-1.33	-1.04
21	72.0	0.30	-1.40	-1.10
22	75.6	0.32	-1.47	-1.15
23	79.2	0.32	-1.53	-1.21
24	82.8	0.33	-1.60	-1.27
25	86.4	0.37	-1.67	-1.30
26	90.0	0.38	-1.74	-1.36
27	93.6	0.39	-1.81	-1.42
28	97.2	0.39	-1.88	-1.49
29	100.8	0.39	-1.95	-1.56
30	104.4	0.40	-2.02	-1.62
31	108.0	0.40	-2.09	-1.69
32	111.6	0.39	-2.16	-1.77
33	115.2	0.40	-2.23	-1.83
34	118.8	0.40	-2.30	-1.90
35	122.4	0.40	-2.37	-1.97
36	126.0	0.40	-2.44	-2.04
37	129.6	0.38	-2.51	-2.13
38	133.2	0.31	-2.58	-2.27
39	136.8	0.28	-2.65	-2.37
40	140.4	0.25	-2.72	-2.47
41	144.0	0.21	-2.79	-2.58
42	147.6	0.18	-2.86	-2.68
43	151.2	0.13	-2.93	-2.80
44	154.8	0.10	-3.00	-2.90

2238+00, MSU St. 48

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0	-0.05	-0.05
3	7.2	0.00	-0.11	-0.11
4	10.8	0.00	-0.16	-0.16
5	14.4	0.01	-0.22	-0.21
6	18.0	0.02	-0.27	-0.25
7	21.6	0.01	-0.33	-0.32
8	25.2	0.04	-0.38	-0.34
9	28.8	0.04	-0.44	-0.40
10	32.4	0.03	-0.49	-0.46
11	36.0	0.03	-0.54	-0.51
12	39.6	0.02	-0.60	-0.58
13	43.2	0.02	-0.65	-0.63
14	46.8	0.04	-0.71	-0.67
15	50.4	0.05	-0.76	-0.71
16	54.0	0.06	-0.82	-0.76
17	57.6	0.09	-0.87	-0.78
18	61.2	0.09	-0.93	-0.84
19	64.8	0.09	-0.98	-0.89
20	68.4	0.10	-1.03	-0.93
21	72.0	0.10	-1.09	-0.99
22	75.6	0.11	-1.14	-1.03
23	79.2	0.11	-1.20	-1.09
24	82.8	0.12	-1.25	-1.13
25	86.4	0.15	-1.31	-1.16
26	90.0	0.13	-1.36	-1.23
27	93.6	0.14	-1.41	-1.27
28	97.2	0.14	-1.47	-1.33
29	100.8	0.12	-1.52	-1.40
30	104.4	0.11	-1.58	-1.47
31	108.0	0.12	-1.63	-1.51
32	111.6	0.12	-1.69	-1.57
33	115.2	0.11	-1.74	-1.63
34	118.8	0.11	-1.80	-1.69
35	122.4	0.11	-1.85	-1.74
36	126.0	0.11	-1.90	-1.79
37	129.6	0.11	-1.96	-1.85
38	133.2	0.10	-2.01	-1.91
39	136.8	0.10	-2.07	-1.97
40	140.4	0.05	-2.12	-2.07
41	144.0	0.01	-2.18	-2.17
42	147.6	0.00	-2.23	-2.23
43	151.2	-0.02	-2.29	-2.31
44	154.8	-0.08	-2.34	-2.42

Table 12EP. Coordinates of the First Annual Post-construction Pavement Profile of East Bound Passing Lane

2244+00, MSU St. 49

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0	-0.06	-0.06
3	7.2	0.01	-0.12	-0.11
4	10.8	0.00	-0.18	-0.18
5	14.4	0.00	-0.24	-0.24
6	18.0	0.01	-0.30	-0.29
7	21.6	0.00	-0.36	-0.36
8	25.2	0.00	-0.42	-0.42
9	28.8	0.00	-0.48	-0.48
10	32.4	0.01	-0.54	-0.53
11	36.0	0.00	-0.60	-0.60
12	39.6	0.01	-0.66	-0.65
13	43.2	0.01	-0.72	-0.71
14	46.8	0.01	-0.78	-0.77
15	50.4	0.02	-0.84	-0.82
16	54.0	0.02	-0.90	-0.88
17	57.6	0.02	-0.96	-0.94
18	61.2	0.02	-1.02	-1.00
19	64.8	0.02	-1.08	-1.06
20	68.4	0.01	-1.14	-1.13
21	72.0	0.02	-1.20	-1.18
22	75.6	0.03	-1.26	-1.23
23	79.2	0.07	-1.32	-1.25
24	82.8	0.09	-1.38	-1.29
25	86.4	0.10	-1.44	-1.34
26	90.0	0.11	-1.50	-1.39
27	93.6	0.10	-1.56	-1.46
28	97.2	0.10	-1.62	-1.52
29	100.8	0.10	-1.68	-1.58
30	104.4	0.10	-1.74	-1.64
31	108.0	0.10	-1.80	-1.70
32	111.6	0.09	-1.86	-1.77
33	115.2	0.08	-1.92	-1.84
34	118.8	0.04	-1.98	-1.94
35	122.4	0.03	-2.04	-2.01
36	126.0	0.03	-2.10	-2.07
37	129.6	0.03	-2.16	-2.13
38	133.2	0.01	-2.22	-2.21
39	136.8	0.02	-2.28	-2.26
40	140.4	0.00	-2.34	-2.34
41	144.0	0.01	-2.40	-2.39
42	147.6	0.01	-2.46	-2.45
43	151.2	-0.04	-2.52	-2.56
44	154.8	-0.07	-2.58	-2.65

2250+00, MSU St. 50

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0	-0.05	-0.05
3	7.2	0.00	-0.10	-0.10
4	10.8	0.00	-0.15	-0.15
5	14.4	0.00	-0.20	-0.20
6	18.0	0.00	-0.25	-0.25
7	21.6	-0.01	-0.30	-0.31
8	25.2	0.00	-0.35	-0.35
9	28.8	-0.01	-0.40	-0.41
10	32.4	-0.01	-0.45	-0.46
11	36.0	-0.02	-0.50	-0.52
12	39.6	-0.03	-0.55	-0.58
13	43.2	-0.03	-0.60	-0.63
14	46.8	-0.03	-0.65	-0.68
15	50.4	-0.03	-0.70	-0.73
16	54.0	-0.03	-0.75	-0.78
17	57.6	-0.03	-0.80	-0.83
18	61.2	0.00	-0.85	-0.85
19	64.8	0.01	-0.90	-0.89
20	68.4	0.00	-0.95	-0.95
21	72.0	0.01	-1.00	-0.99
22	75.6	0.02	-1.05	-1.03
23	79.2	0.05	-1.11	-1.06
24	82.8	0.09	-1.16	-1.07
25	86.4	0.09	-1.21	-1.12
26	90.0	0.10	-1.26	-1.16
27	93.6	0.10	-1.31	-1.21
28	97.2	0.10	-1.36	-1.26
29	100.8	0.09	-1.41	-1.32
30	104.4	0.10	-1.46	-1.36
31	108.0	0.10	-1.51	-1.41
32	111.6	0.10	-1.56	-1.46
33	115.2	0.10	-1.61	-1.51
34	118.8	0.08	-1.66	-1.58
35	122.4	0.08	-1.71	-1.63
36	126.0	0.08	-1.76	-1.68
37	129.6	0.08	-1.81	-1.73
38	133.2	0.09	-1.86	-1.77
39	136.8	0.09	-1.91	-1.82
40	140.4	0.09	-1.96	-1.87
41	144.0	0.05	-2.01	-1.96
42	147.6	0.03	-2.06	-2.03
43	151.2	0.02	-2.11	-2.09
44	154.8	0.00	-2.16	-2.16

Table 13EP. Coordinates of the First Annual Post-construction Pavement Profile of East Bound Passing Lane

2254+00, MSU St. 51

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.02	-0.06	-0.04
3	7.2	0.02	-0.12	-0.10
4	10.8	0.01	-0.18	-0.17
5	14.4	0.02	-0.23	-0.21
6	18.0	0.02	-0.29	-0.27
7	21.6	0.02	-0.35	-0.33
8	25.2	0.02	-0.41	-0.39
9	28.8	0.03	-0.47	-0.44
10	32.4	0.04	-0.53	-0.49
11	36.0	0.05	-0.59	-0.54
12	39.6	0.05	-0.64	-0.59
13	43.2	0.05	-0.70	-0.65
14	46.8	0.04	-0.76	-0.72
15	50.4	0.05	-0.82	-0.77
16	54.0	0.05	-0.88	-0.83
17	57.6	0.06	-0.94	-0.88
18	61.2	0.07	-1.00	-0.93
19	64.8	0.10	-1.05	-0.95
20	68.4	0.11	-1.11	-1.00
21	72.0	0.11	-1.17	-1.06
22	75.6	0.13	-1.23	-1.10
23	79.2	0.17	-1.29	-1.12
24	82.8	0.20	-1.35	-1.15
25	86.4	0.20	-1.41	-1.21
26	90.0	0.23	-1.47	-1.24
27	93.6	0.23	-1.52	-1.29
28	97.2	0.23	-1.58	-1.35
29	100.8	0.23	-1.64	-1.41
30	104.4	0.22	-1.70	-1.48
31	108.0	0.23	-1.76	-1.53
32	111.6	0.23	-1.82	-1.59
33	115.2	0.20	-1.88	-1.68
34	118.8	0.16	-1.93	-1.77
35	122.4	0.18	-1.99	-1.81
36	126.0	0.16	-2.05	-1.89
37	129.6	0.16	-2.11	-1.95
38	133.2	0.15	-2.17	-2.02
39	136.8	0.18	-2.23	-2.05
40	140.4	0.18	-2.29	-2.11
41	144.0	0.14	-2.34	-2.20
42	147.6	0.13	-2.40	-2.27
43	151.2	0.09	-2.46	-2.37
44	154.8	0.04	-2.52	-2.48

2260+00, MSU St. 52

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	-0.02	-0.03	-0.05
3	7.2	-0.05	-0.07	-0.12
4	10.8	-0.05	-0.10	-0.15
5	14.4	-0.05	-0.13	-0.18
6	18.0	-0.05	-0.17	-0.22
7	21.6	-0.05	-0.20	-0.25
8	25.2	-0.01	-0.23	-0.24
9	28.8	0.00	-0.27	-0.27
10	32.4	0.00	-0.30	-0.30
11	36.0	0.00	-0.33	-0.33
12	39.6	0.01	-0.37	-0.36
13	43.2	0.01	-0.40	-0.39
14	46.8	0.01	-0.44	-0.43
15	50.4	0.01	-0.47	-0.46
16	54.0	0.02	-0.50	-0.48
17	57.6	0.02	-0.54	-0.52
18	61.2	0.01	-0.57	-0.56
19	64.8	0.03	-0.60	-0.57
20	68.4	0.03	-0.64	-0.61
21	72.0	0.04	-0.67	-0.63
22	75.6	0.05	-0.70	-0.66
23	79.2	0.07	-0.74	-0.67
24	82.8	0.10	-0.77	-0.67
25	86.4	0.11	-0.80	-0.69
26	90.0	0.11	-0.84	-0.73
27	93.6	0.13	-0.87	-0.74
28	97.2	0.13	-0.90	-0.77
29	100.8	0.12	-0.94	-0.82
30	104.4	0.12	-0.97	-0.85
31	108.0	0.12	-1.00	-0.88
32	111.6	0.12	-1.04	-0.92
33	115.2	0.12	-1.07	-0.95
34	118.8	0.11	-1.11	-1.00
35	122.4	0.07	-1.14	-1.07
36	126.0	0.06	-1.17	-1.11
37	129.6	0.06	-1.21	-1.15
38	133.2	0.04	-1.24	-1.20
39	136.8	0.04	-1.27	-1.23
40	140.4	0.03	-1.31	-1.28
41	144.0	0.03	-1.34	-1.31
42	147.6	0.00	-1.37	-1.37
43	151.2	-0.01	-1.41	-1.42
44	154.8	-0.04	-1.44	-1.48

Table 9EP. Coordinates of the First Annual Post-construction Pavement Profile of East Bound Passing Lane

2208+00, MSU St. 43

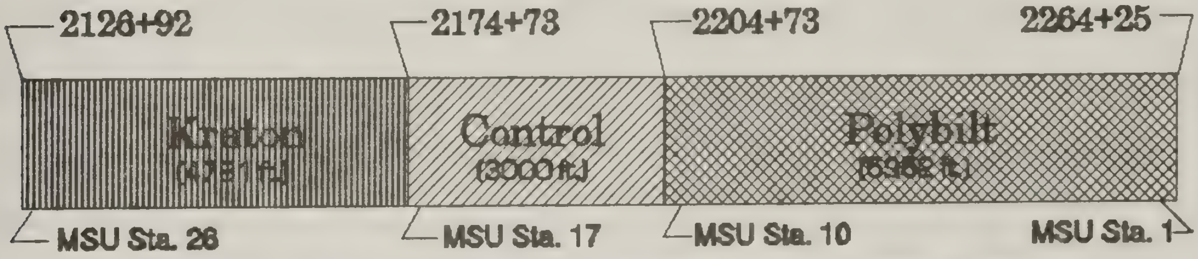
Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.02	-0.06	-0.04
3	7.2	0.01	-0.12	-0.11
4	10.8	0.00	-0.18	-0.18
5	14.4	-0.01	-0.23	-0.24
6	18.0	-0.02	-0.29	-0.31
7	21.6	-0.03	-0.35	-0.38
8	25.2	-0.02	-0.41	-0.43
9	28.8	-0.02	-0.47	-0.49
10	32.4	-0.03	-0.53	-0.56
11	36.0	-0.05	-0.59	-0.64
12	39.6	-0.05	-0.64	-0.69
13	43.2	-0.06	-0.70	-0.76
14	46.8	-0.08	-0.76	-0.84
15	50.4	-0.07	-0.82	-0.89
16	54.0	-0.07	-0.88	-0.95
17	57.6	-0.08	-0.94	-1.02
18	61.2	-0.06	-1.00	-1.06
19	64.8	-0.05	-1.05	-1.10
20	68.4	-0.07	-1.11	-1.18
21	72.0	-0.08	-1.17	-1.25
22	75.6	-0.08	-1.23	-1.31
23	79.2	-0.09	-1.29	-1.37
24	82.8	-0.09	-1.35	-1.44
25	86.4	-0.08	-1.41	-1.49
26	90.0	-0.09	-1.47	-1.55
27	93.6	-0.10	-1.52	-1.62
28	97.2	-0.10	-1.58	-1.68
29	100.8	-0.08	-1.64	-1.72
30	104.4	-0.08	-1.70	-1.78
31	108.0	-0.09	-1.76	-1.85
32	111.6	-0.10	-1.82	-1.92
33	115.2	-0.10	-1.88	-1.98
34	118.8	-0.12	-1.93	-2.05
35	122.4	-0.12	-1.99	-2.11
36	126.0	-0.13	-2.05	-2.18
37	129.6	-0.14	-2.11	-2.25
38	133.2	-0.18	-2.17	-2.35
39	136.8	-0.18	-2.23	-2.41
40	140.4	-0.15	-2.29	-2.44
41	144.0	-0.20	-2.34	-2.54
42	147.6	-0.22	-2.40	-2.62
43	151.2	-0.25	-2.46	-2.71
44	154.8	-0.30	-2.52	-2.82

2214+00, MSU St. 44

Point	Pavement Width (X)	Profilograph Coordinates	Profilograph Level (in)	Pavement Elevation(Y)
1	0.0	0	0.00	0.00
2	3.6	0.03	-0.06	-0.03
3	7.2	0.01	-0.12	-0.11
4	10.8	0.01	-0.18	-0.17
5	14.4	0.03	-0.23	-0.20
6	18.0	0.01	-0.29	-0.28
7	21.6	0.03	-0.35	-0.32
8	25.2	0.02	-0.41	-0.39
9	28.8	0.01	-0.47	-0.46
10	32.4	0.00	-0.53	-0.53
11	36.0	-0.01	-0.59	-0.60
12	39.6	-0.01	-0.64	-0.65
13	43.2	-0.01	-0.70	-0.71
14	46.8	0.01	-0.76	-0.75
15	50.4	0.02	-0.82	-0.80
16	54.0	0.03	-0.88	-0.85
17	57.6	0.04	-0.94	-0.90
18	61.2	0.05	-1.00	-0.95
19	64.8	0.05	-1.05	-1.00
20	68.4	0.07	-1.11	-1.04
21	72.0	0.08	-1.17	-1.09
22	75.6	0.07	-1.23	-1.16
23	79.2	0.08	-1.29	-1.21
24	82.8	0.11	-1.35	-1.24
25	86.4	0.08	-1.41	-1.33
26	90.0	0.08	-1.47	-1.39
27	93.6	0.07	-1.52	-1.45
28	97.2	0.06	-1.58	-1.52
29	100.8	0.05	-1.64	-1.59
30	104.4	0.04	-1.70	-1.66
31	108.0	0.04	-1.76	-1.72
32	111.6	0.03	-1.82	-1.79
33	115.2	0.02	-1.88	-1.86
34	118.8	-0.01	-1.93	-1.94
35	122.4	-0.02	-1.99	-2.01
36	126.0	0.01	-2.05	-2.04
37	129.6	-0.02	-2.11	-2.13
38	133.2	-0.03	-2.17	-2.20
39	136.8	-0.06	-2.23	-2.29
40	140.4	-0.09	-2.29	-2.38
41	144.0	-0.14	-2.34	-2.48
42	147.6	-0.15	-2.40	-2.55
43	151.2	-0.19	-2.46	-2.65
44	154.8	-0.14	-2.52	-2.66

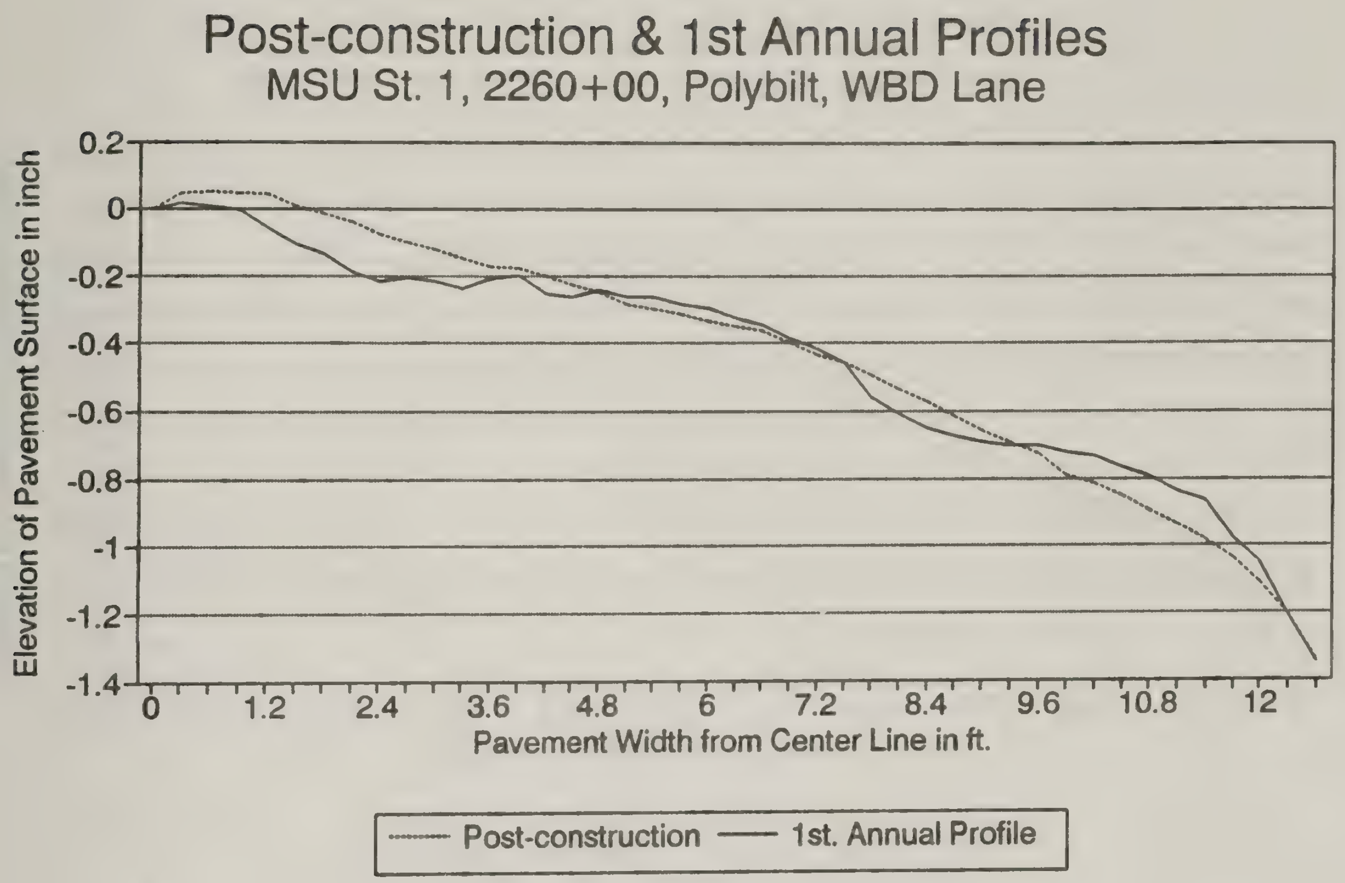
Appendix D

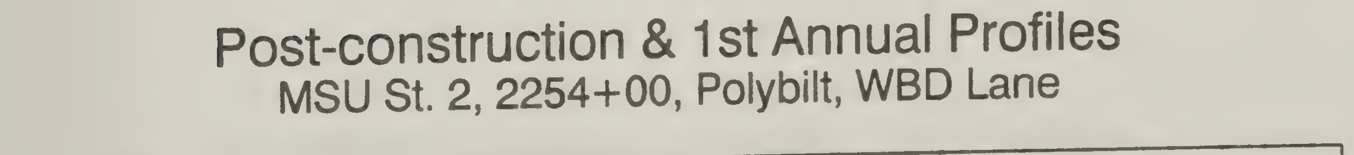
-Plots of the First Annual and Post-construction Pavement Profiles of West Bound Driving Lane by MSU Station Number, Highway Station Number and Modifier Used

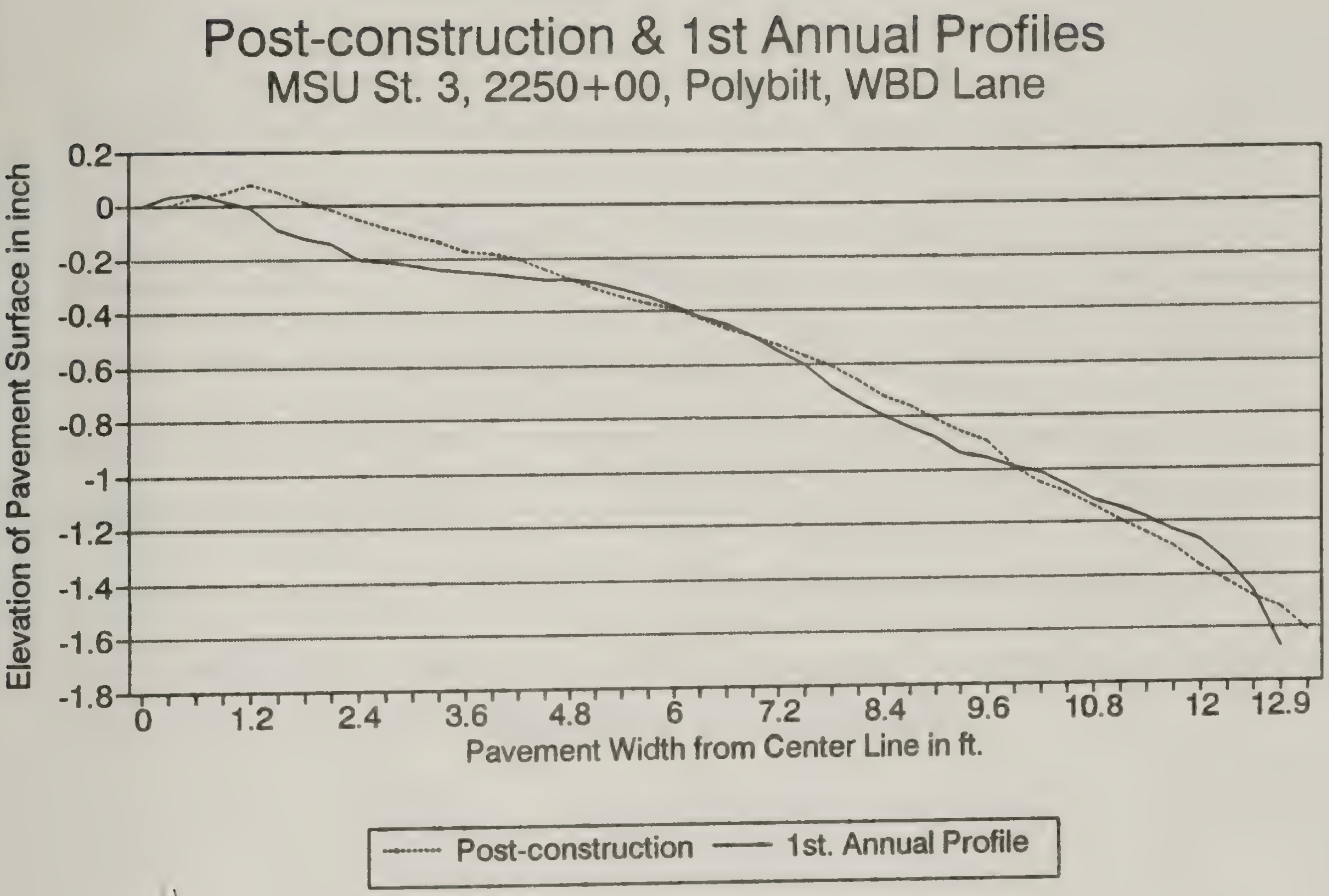


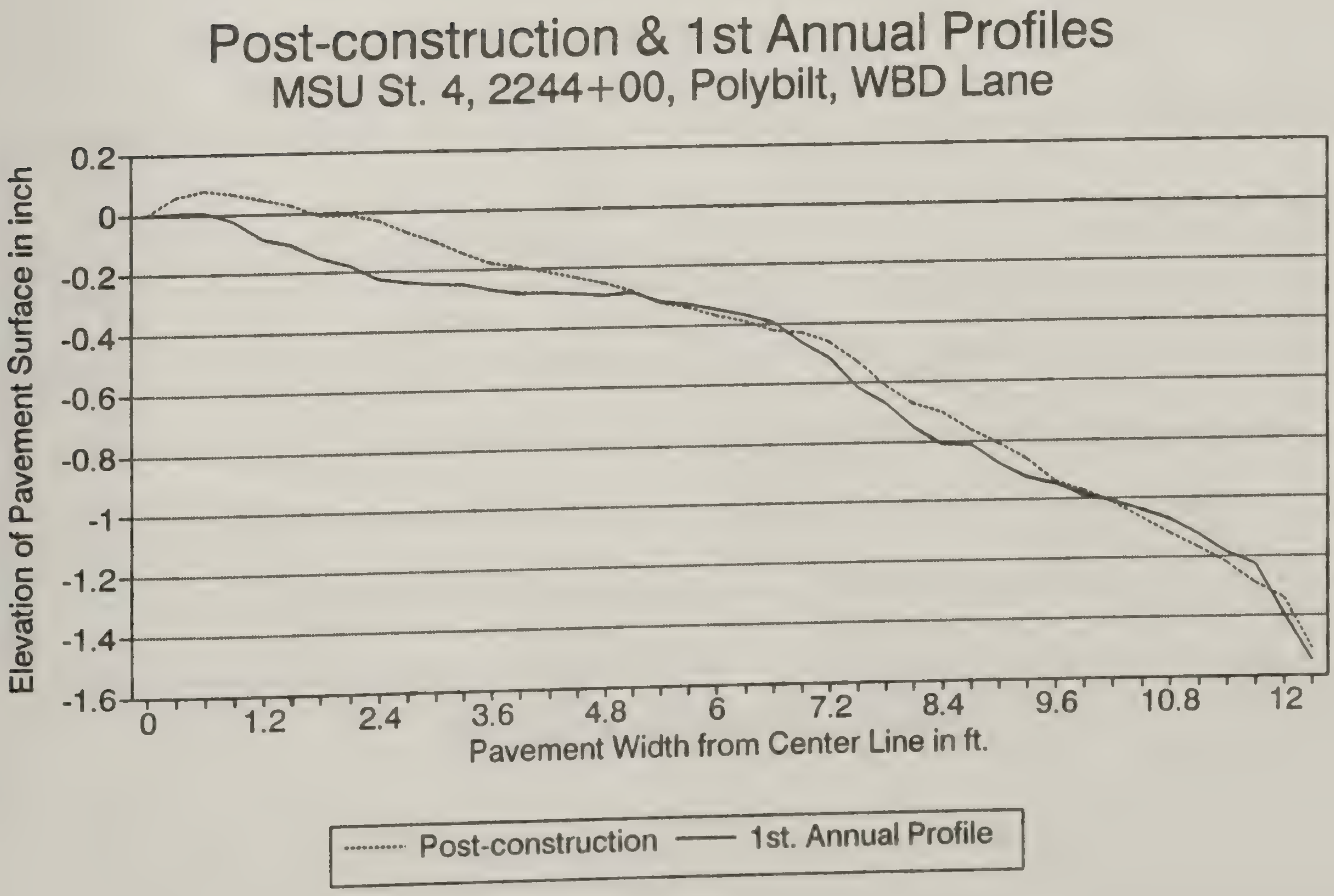
West Bound Field Experimental Test Section

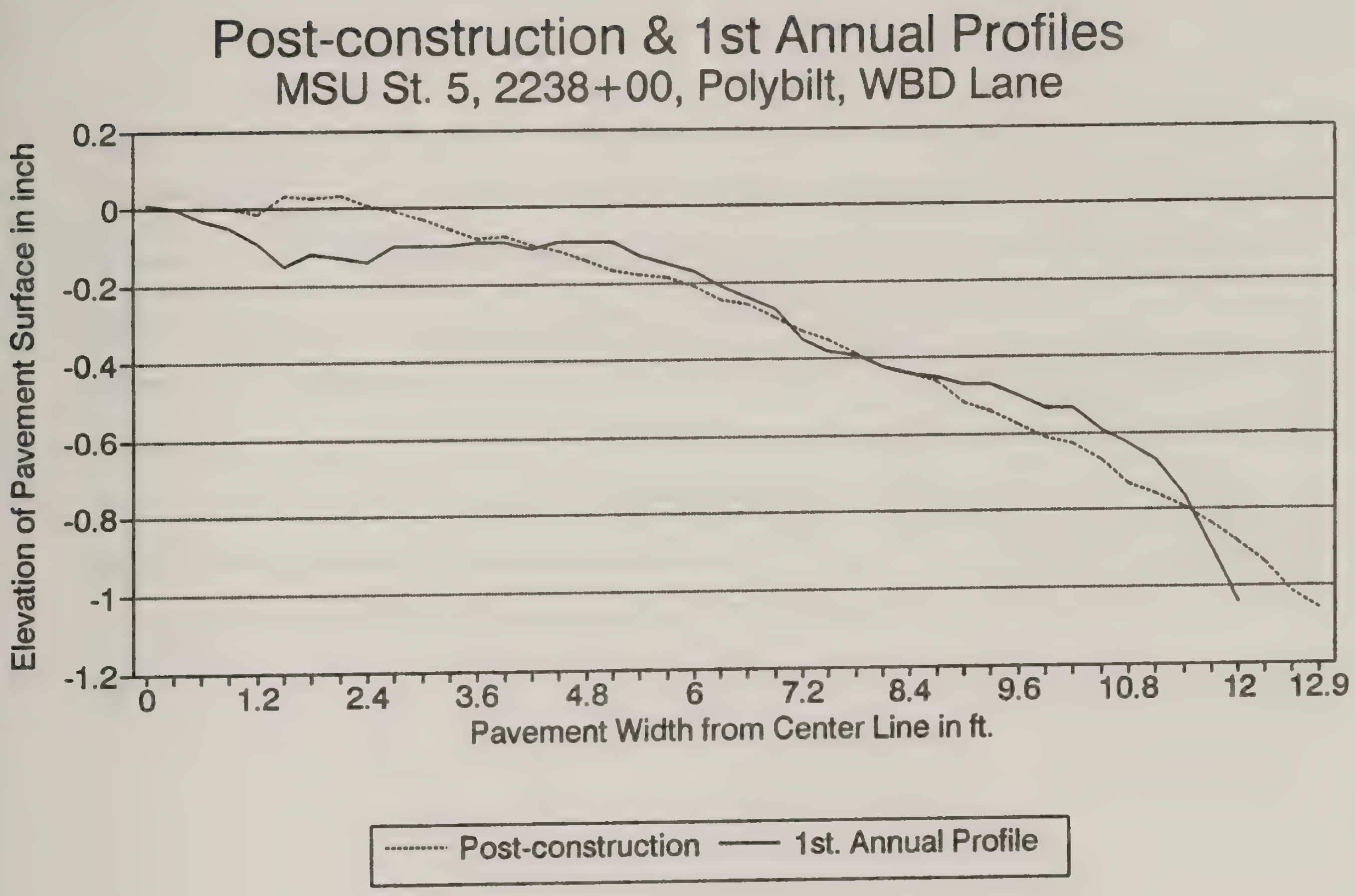
MSU Station Number	Highway Station	Section by Binder Used
1	2260+00	Polybilt
2	2254+00	Polybilt
3	2250+00	Polybilt
4	2244+00	Polybilt
5	2238+00	Polybilt
6	2232+00	Polybilt
7	2226+00	Polybilt
8	2220+00	Polybilt
9	2214+00	Polybilt
10	2208+00	Polybilt
11	2200+00	Exxon
12	2196+00	Exxon
13	2192+00	Exxon
14	2188+00	Exxon
15	2184+00	Exxon
16	2180+00	Exxon
17	2176+00	Exxon
18	2170+00	Kraton
19	2164+00	Kraton
20	2160+00	Kraton
21	2154+00	Kraton
22	2150+00	Kraton
23	2144+00	Kraton
24	2138+00	Kraton
25	2134+00	Kraton
26	2130+00	Kraton


Post-construction & 1st Annual Profiles
MSU St. 1, 2260+00, Polybilt, WBD Lane

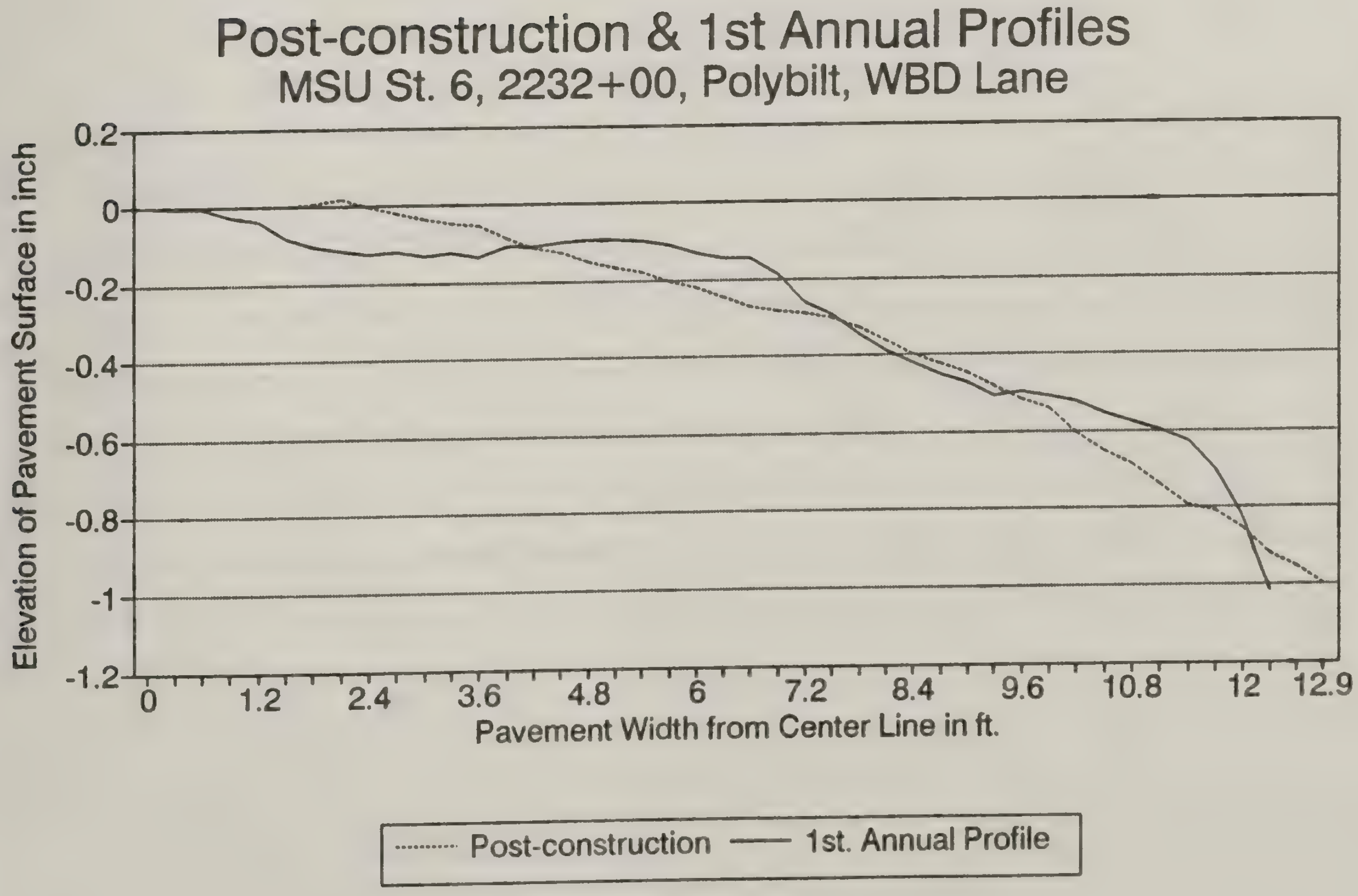

Post-construction & 1st Annual Profiles
MSU St. 2, 2254+00, Polybilt, WBD Lane


Post-construction & 1st Annual Profiles
MSU St. 3, 2250+00, Polybilt, WBD Lane
Elevation of Pavement Surface in inch
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
-1.2
-1.4
-1.6
-1.8
0
1.2
2.4
3.6
4.8
6
7.2
8.4
9.6
10.8
12
12.9
Pavement Width from Center Line in ft.
Post-construction
1st. Annual Profile

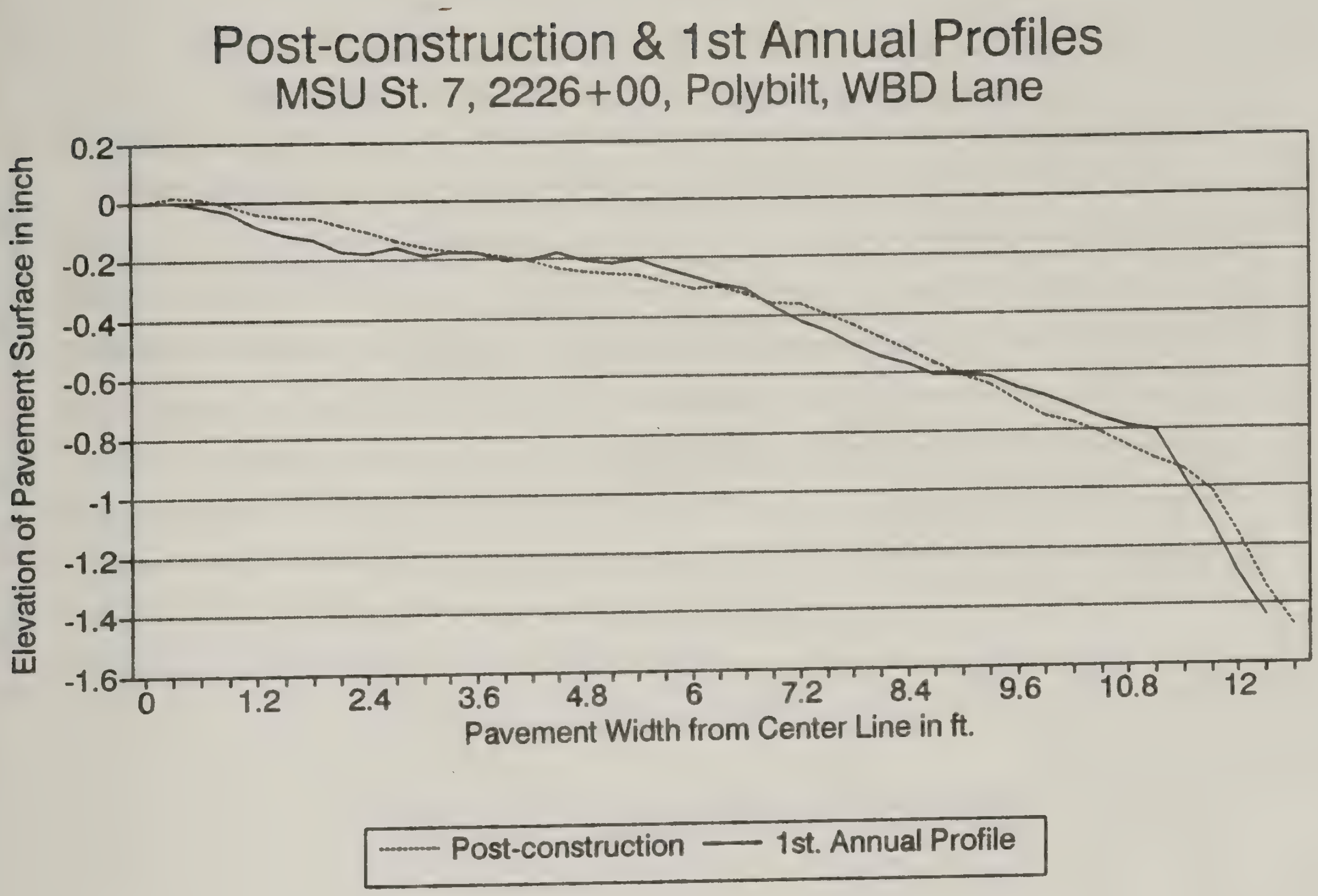

Post-construction & 1st Annual Profiles
MSU St. 4, 2244+00, Polybilt, WBD Lane
Elevation of Pavement Surface in inch
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
-1.2
-1.4
-1.6
0
1.2
2.4
3.6
4.8
6
7.2
8.4
9.6
10.8
12
Pavement Width from Center Line in ft.
Post-construction
1st. Annual Profile

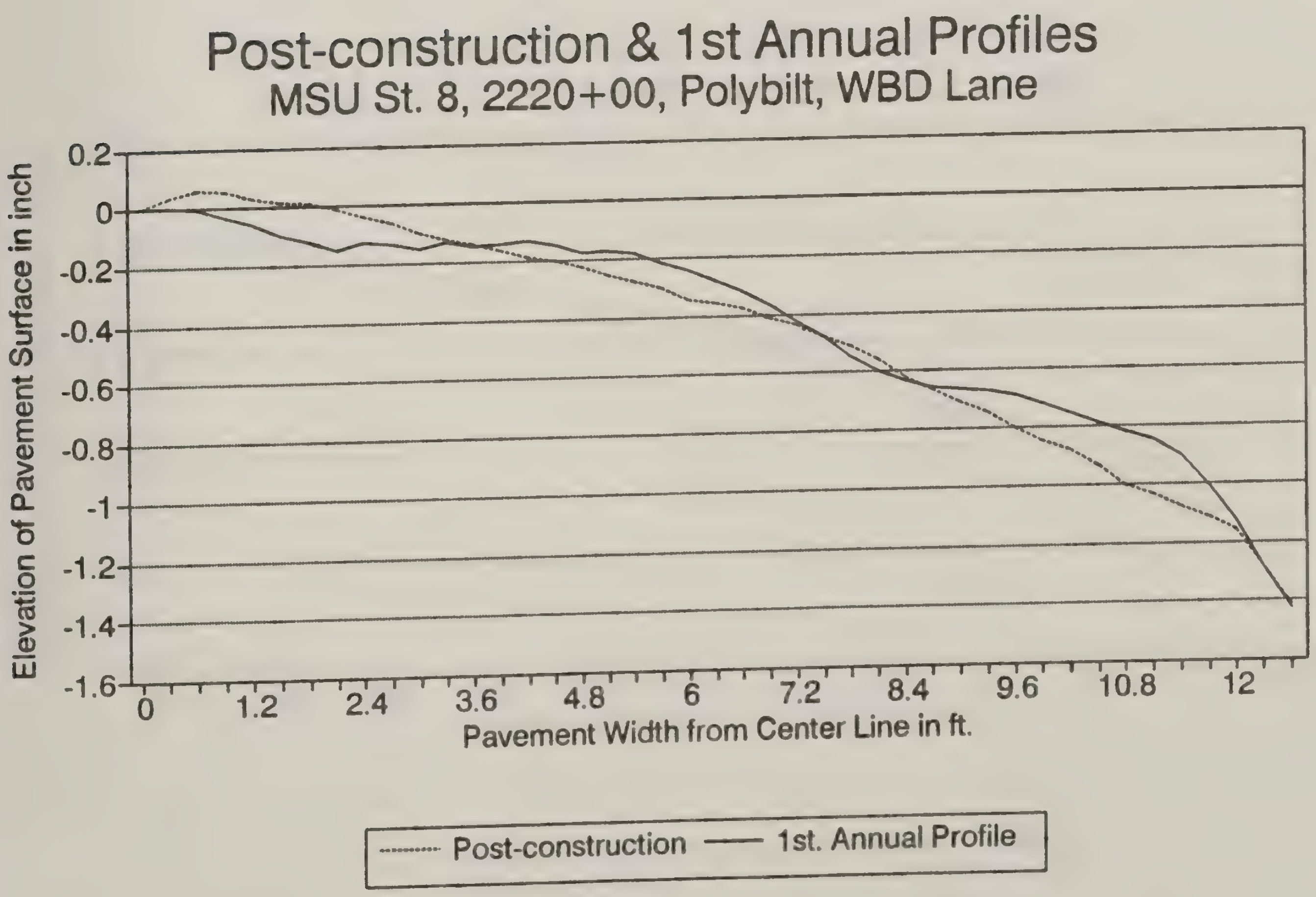


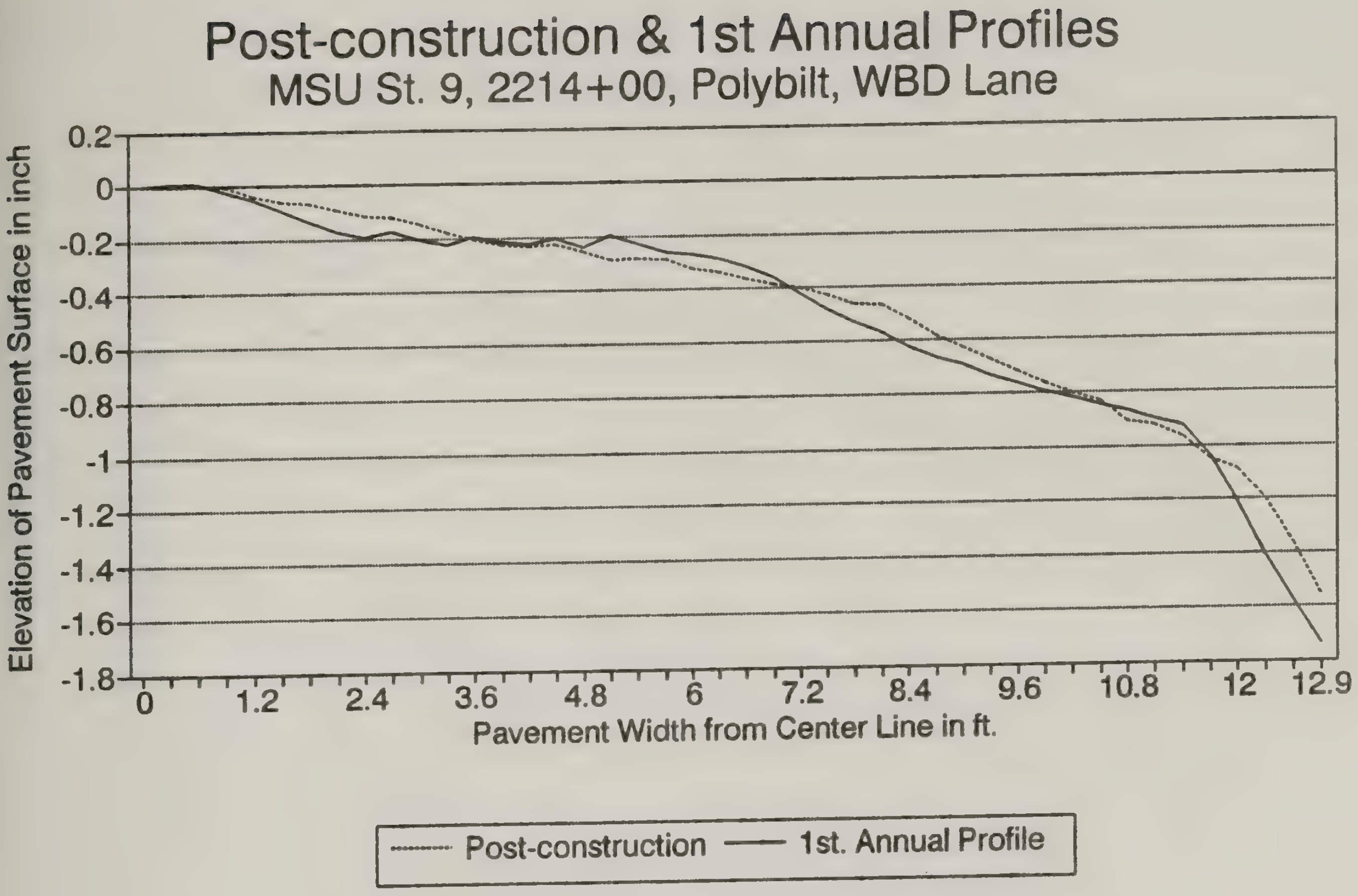
Post-construction & 1st Annual Profiles
MSU St. 5, 2238+00, Polybilt, WBD Lane



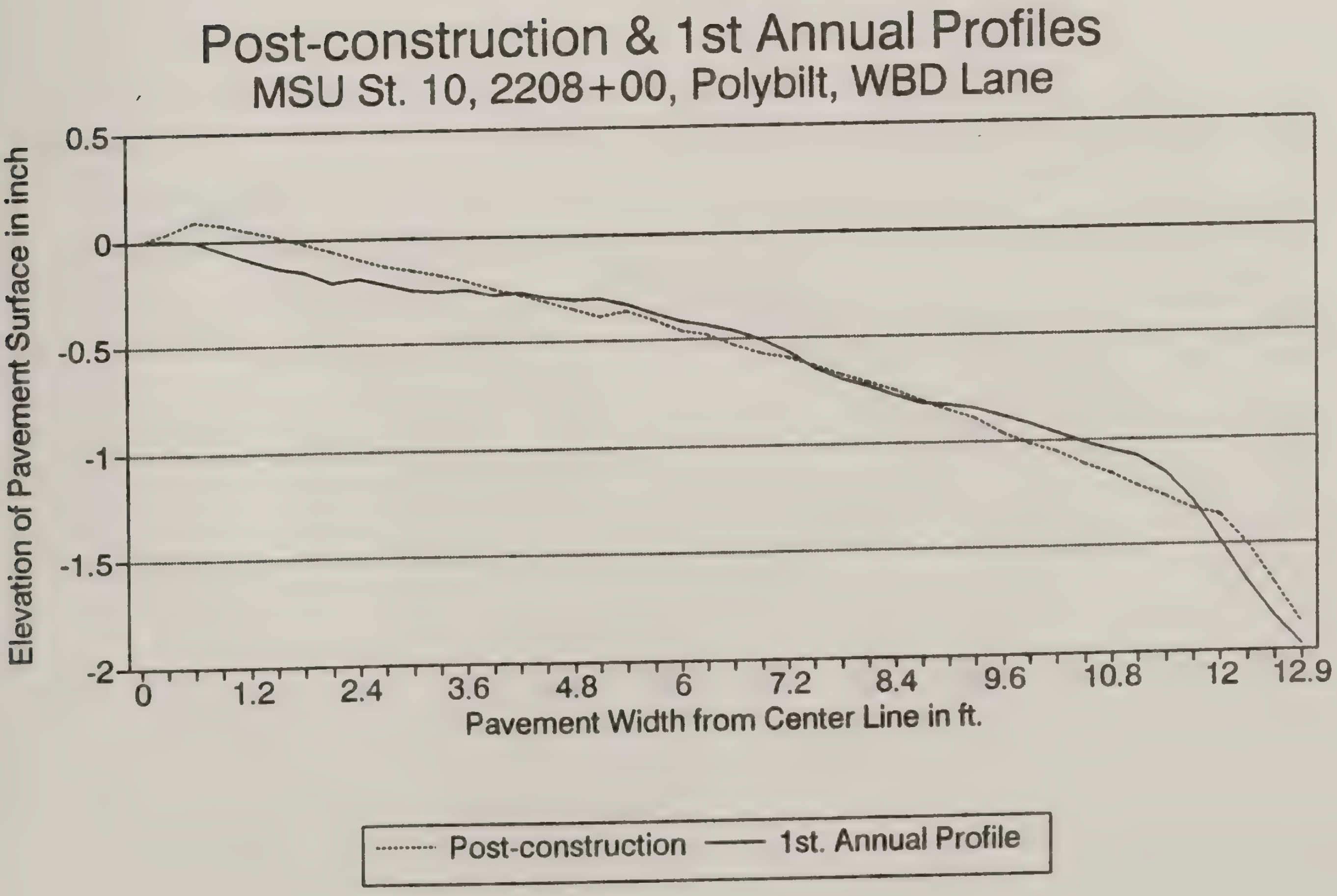
Post-construction & 1st Annual Profiles
MSU St. 6, 2232+00, Polybilt, WBD Lane


Post-construction & 1st Annual Profiles
MSU St. 7, 2226+00, Polybilt, WBD Lane
Elevation of Pavement Surface in inch
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
-1.2
-1.4
-1.6
0
1.2
2.4
3.6
4.8
6
7.2
8.4
9.6
10.8
12
Pavement Width from Center Line in ft.
Post-construction
1st. Annual Profile

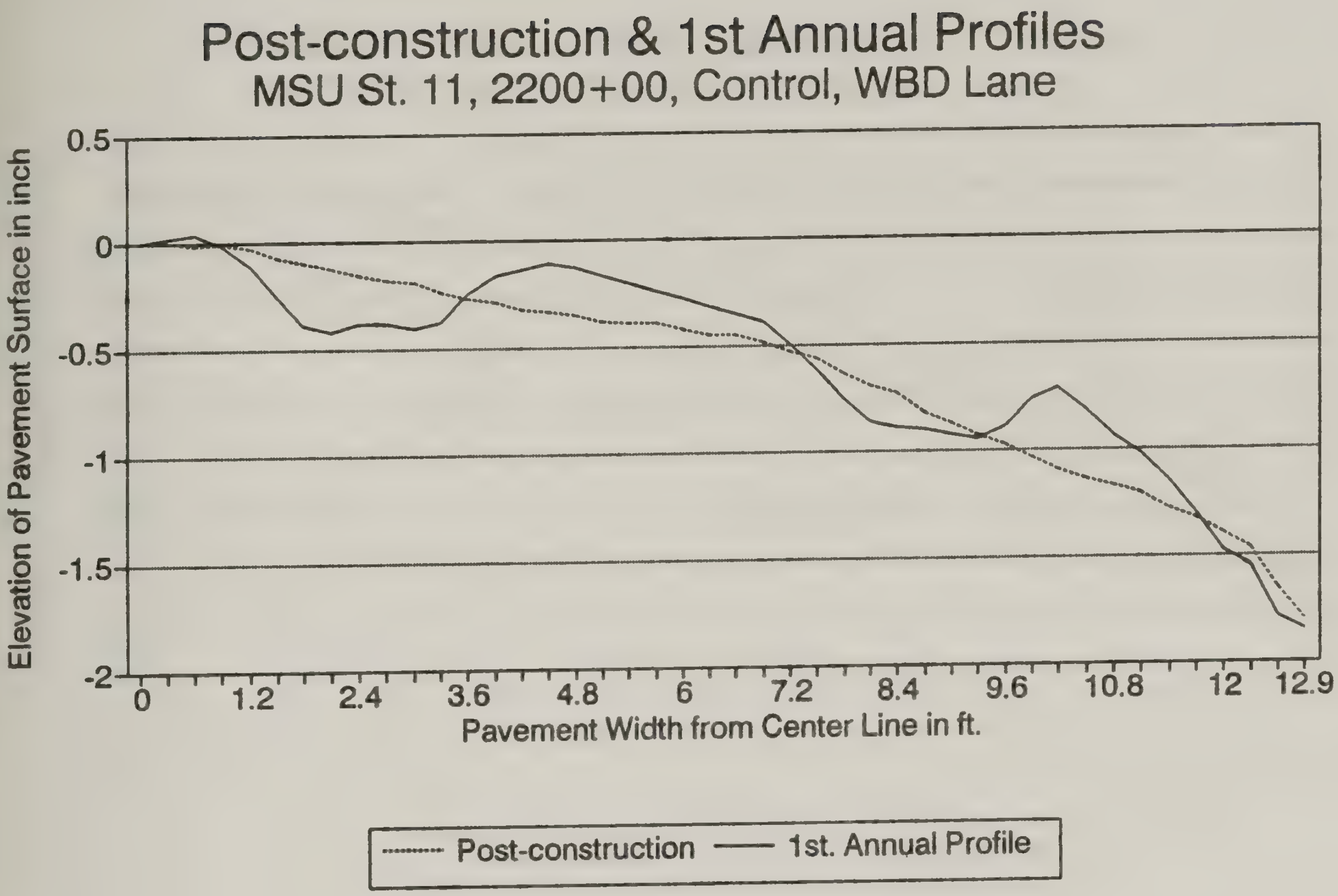

Post-construction & 1st Annual Profiles
MSU St. 8, 2220+00, Polybilt, WBD Lane
Elevation of Pavement Surface in inch
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
-1.2
-1.4
-1.6
0
1.2
2.4
3.6
4.8
6
7.2
8.4
9.6
10.8
12
Pavement Width from Center Line in ft.
Post-construction
1st. Annual Profile



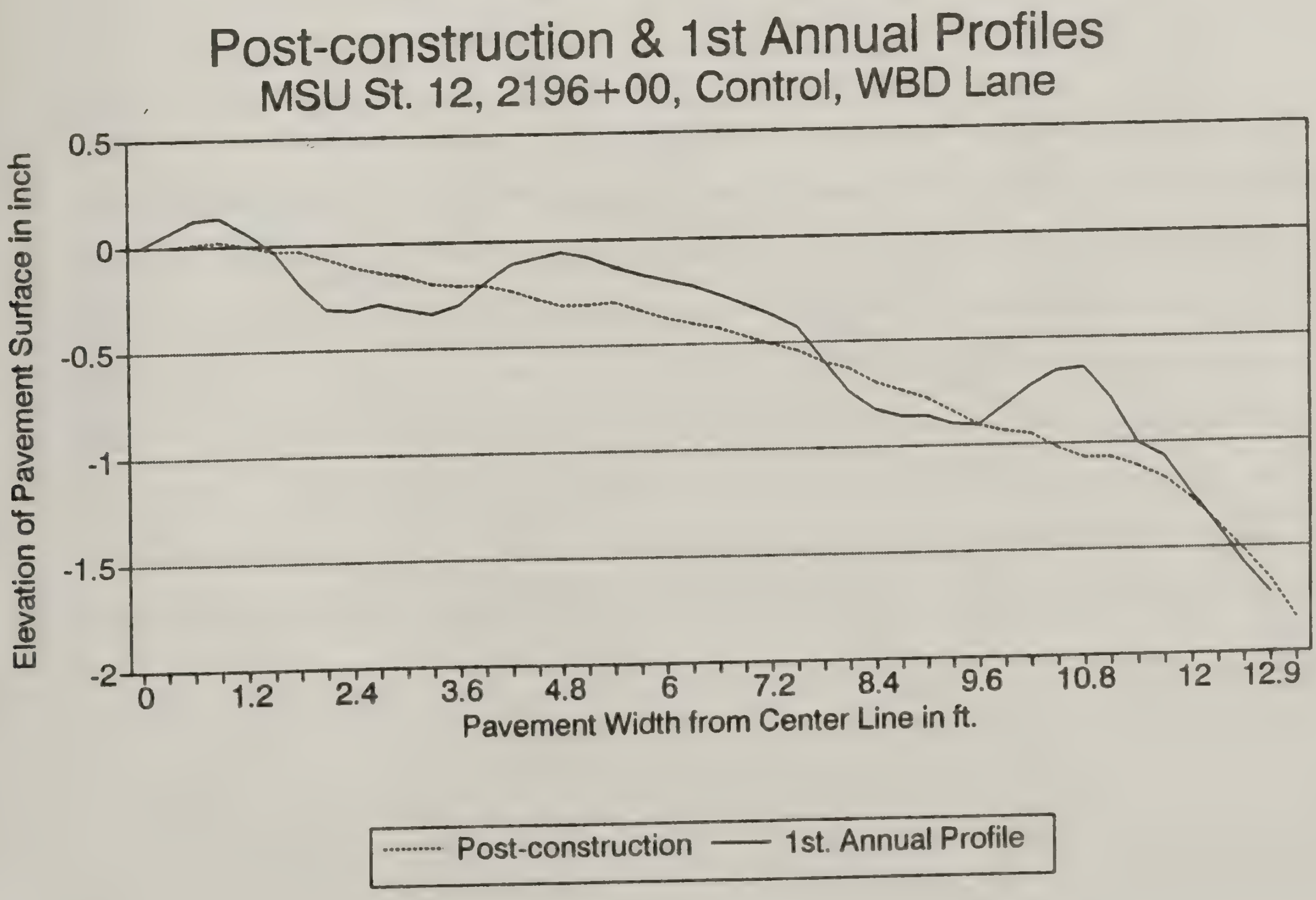
Post-construction & 1st Annual Profiles
MSU St. 9, 2214+00, Polybilt, WBD Lane



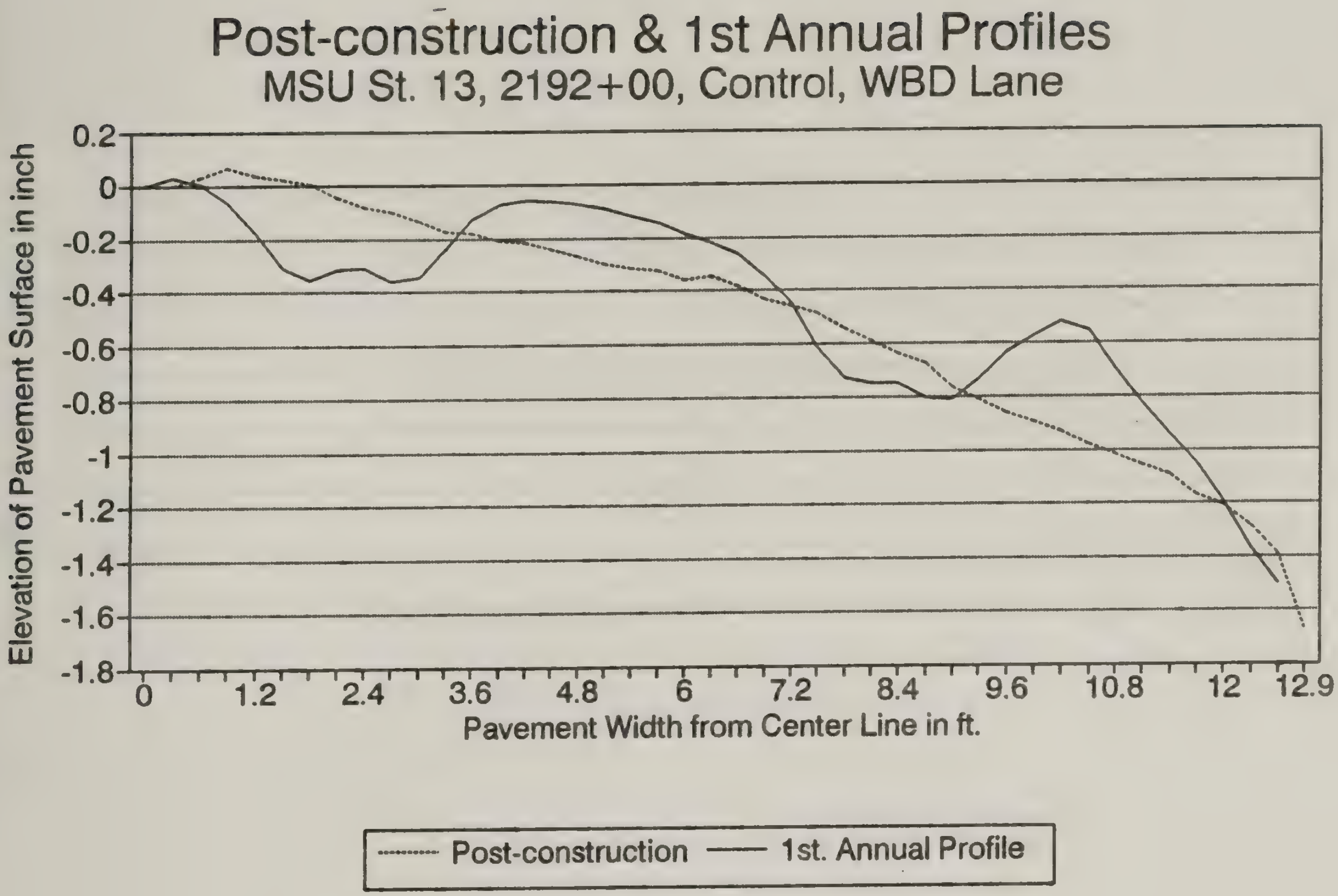
Post-construction & 1st Annual Profiles
MSU St. 10, 2208+00, Polybilt, WBD Lane

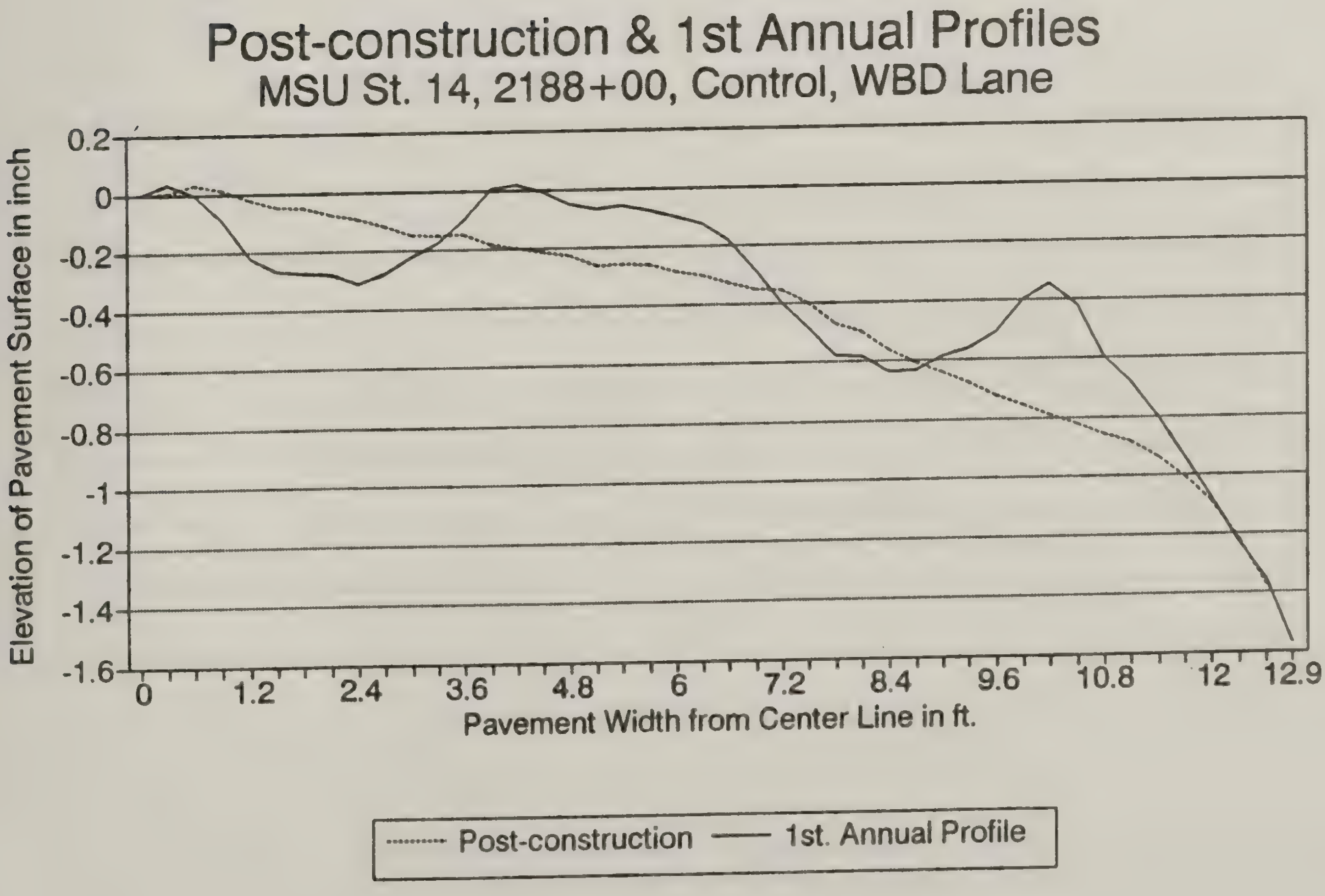


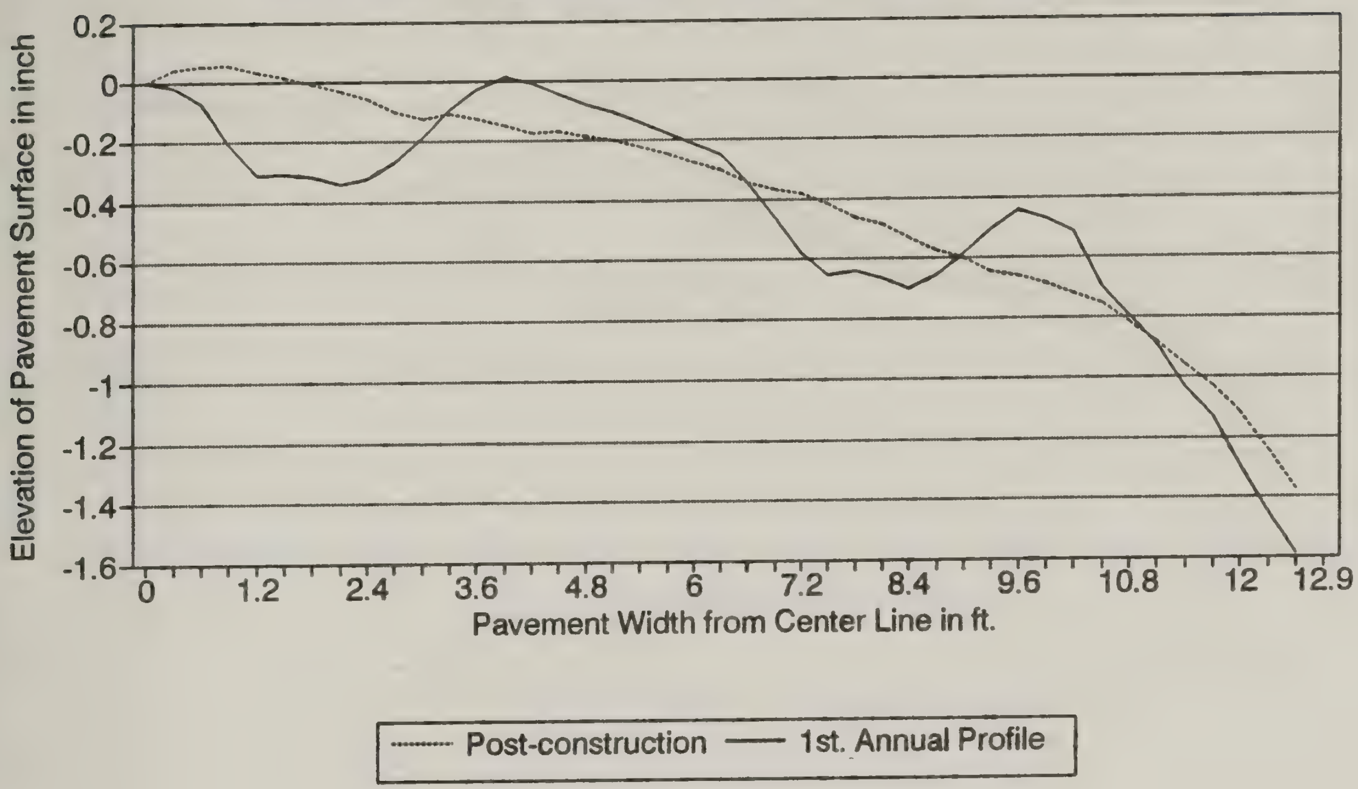
Post-construction & 1st Annual Profiles
MSU St. 11, 2200+00, Control, WBD Lane



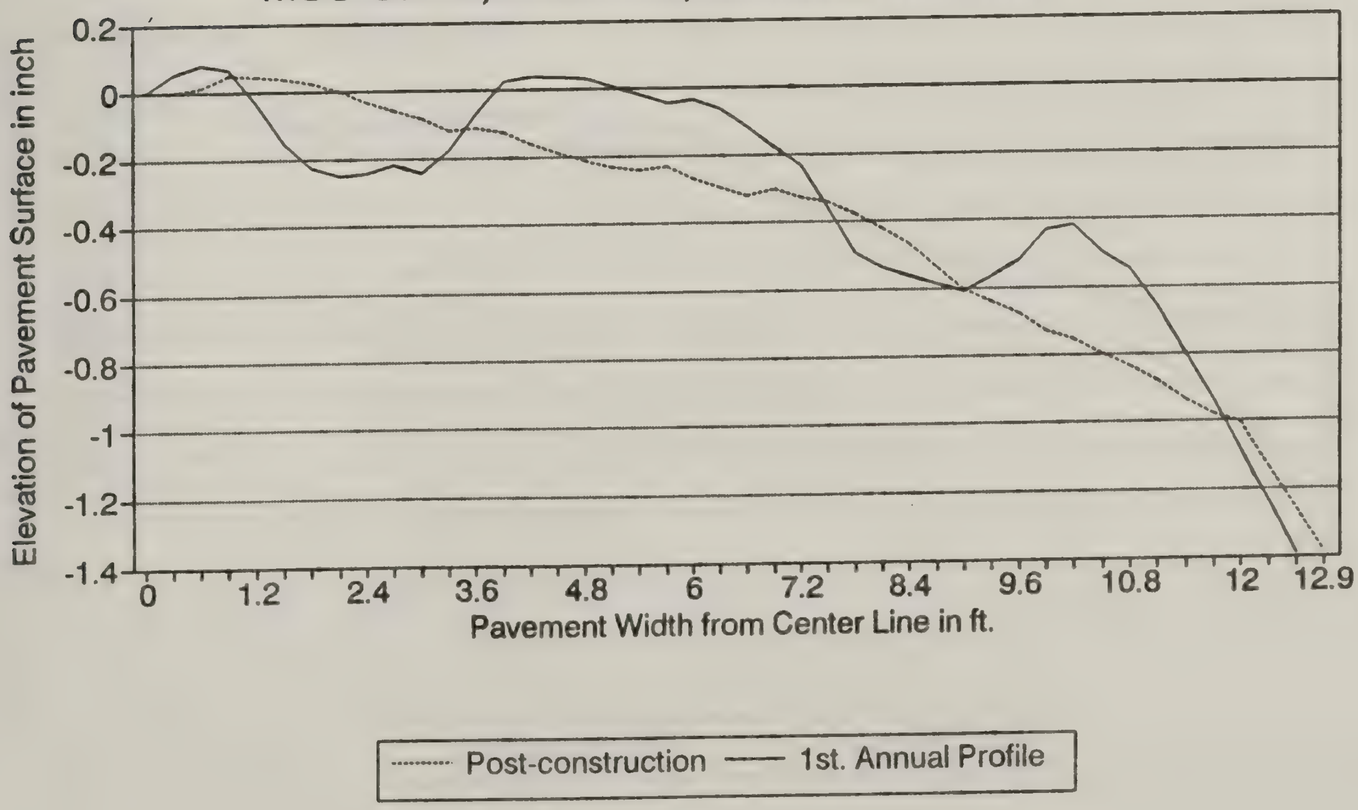
Post-construction & 1st Annual Profiles
MSU St. 12, 2196+00, Control, WBD Lane


Post-construction & 1st Annual Profiles
MSU St. 13, 2192+00, Control, WBD Lane
Elevation of Pavement Surface in inch
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
-1.2
-1.4
-1.6
-1.8
0
1.2
2.4
3.6
4.8
6
7.2
8.4
9.6
10.8
12
12.9
Pavement Width from Center Line in ft.
Post-construction
1st. Annual Profile

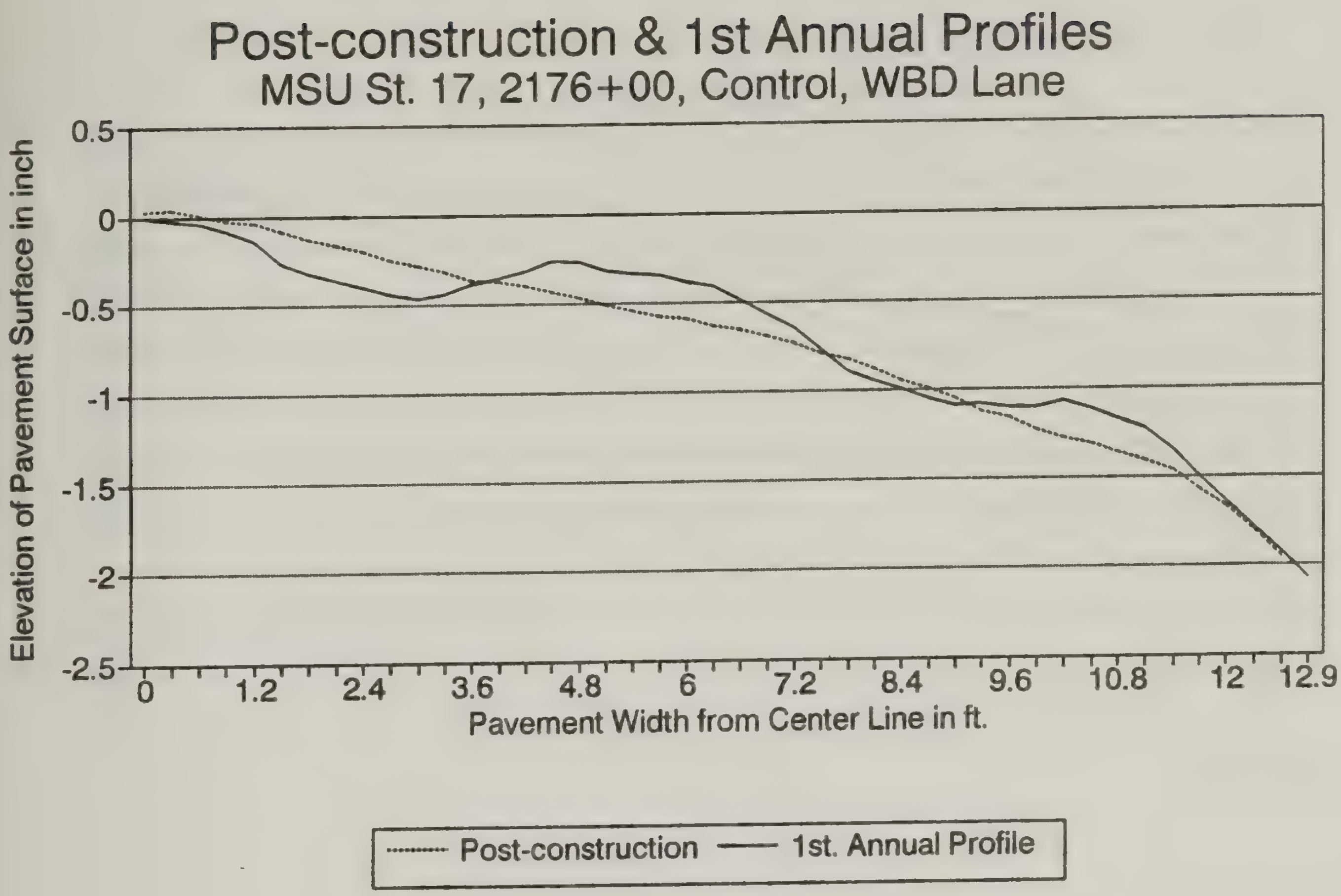

Post-construction & 1st Annual Profiles
MSU St. 14, 2188+00, Control, WBD Lane
Elevation of Pavement Surface in inch
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
-1.2
-1.4
-1.6
0
1.2
2.4
3.6
4.8
6
7.2
8.4
9.6
10.8
12
12.9
Pavement Width from Center Line in ft.
Post-construction
1st. Annual Profile



Post-construction & 1st Annual Profiles
MSU St. 15, 2184+00, Control, WBD Lane

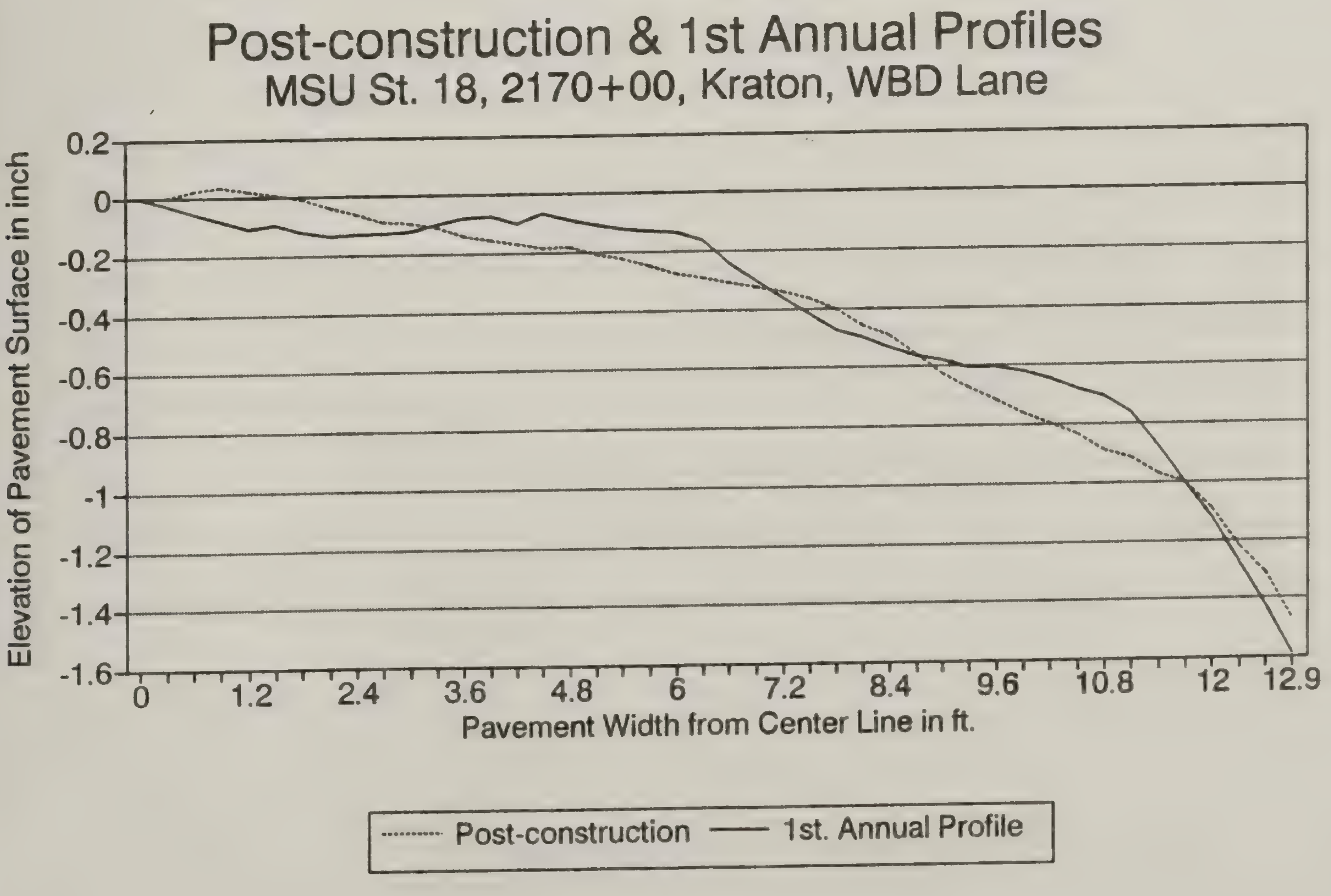


Post-construction & 1st Annual Profiles
MSU St. 16, 2180+00, Control, WBD Lane



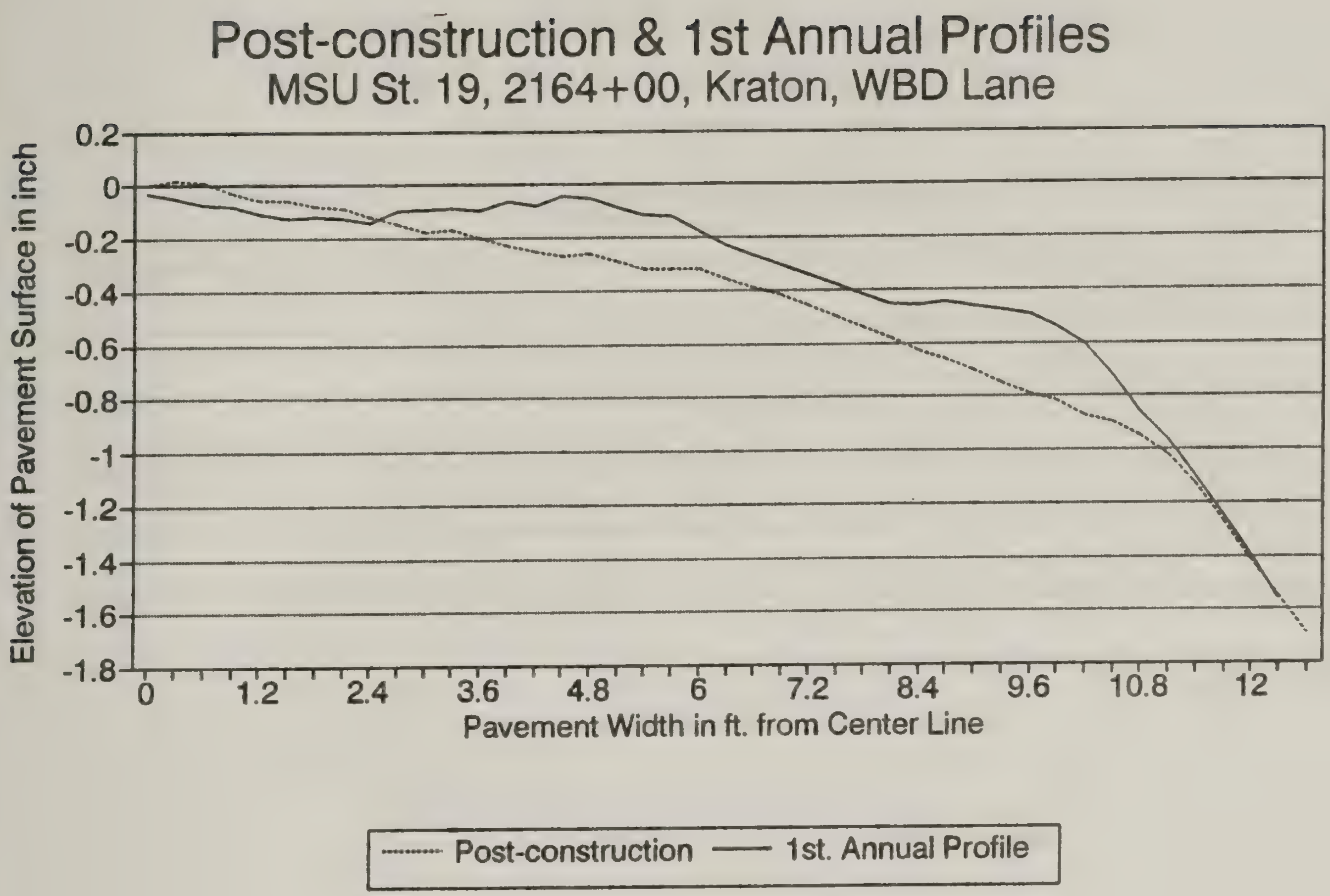
Post-construction & 1st Annual Profiles

MSU St. 17, 2176+00, Control, WBD Lane

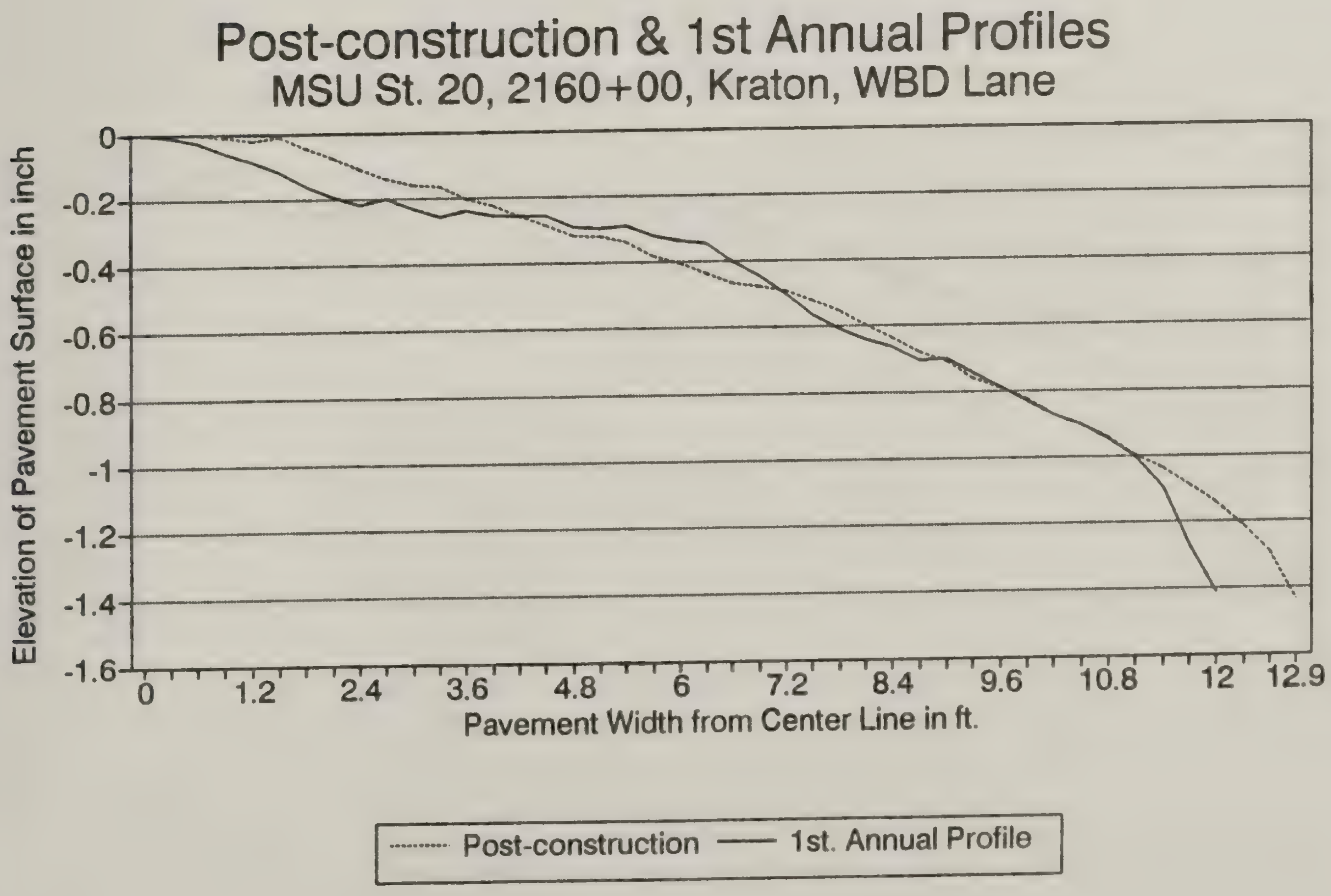


Post-construction & 1st Annual Profiles

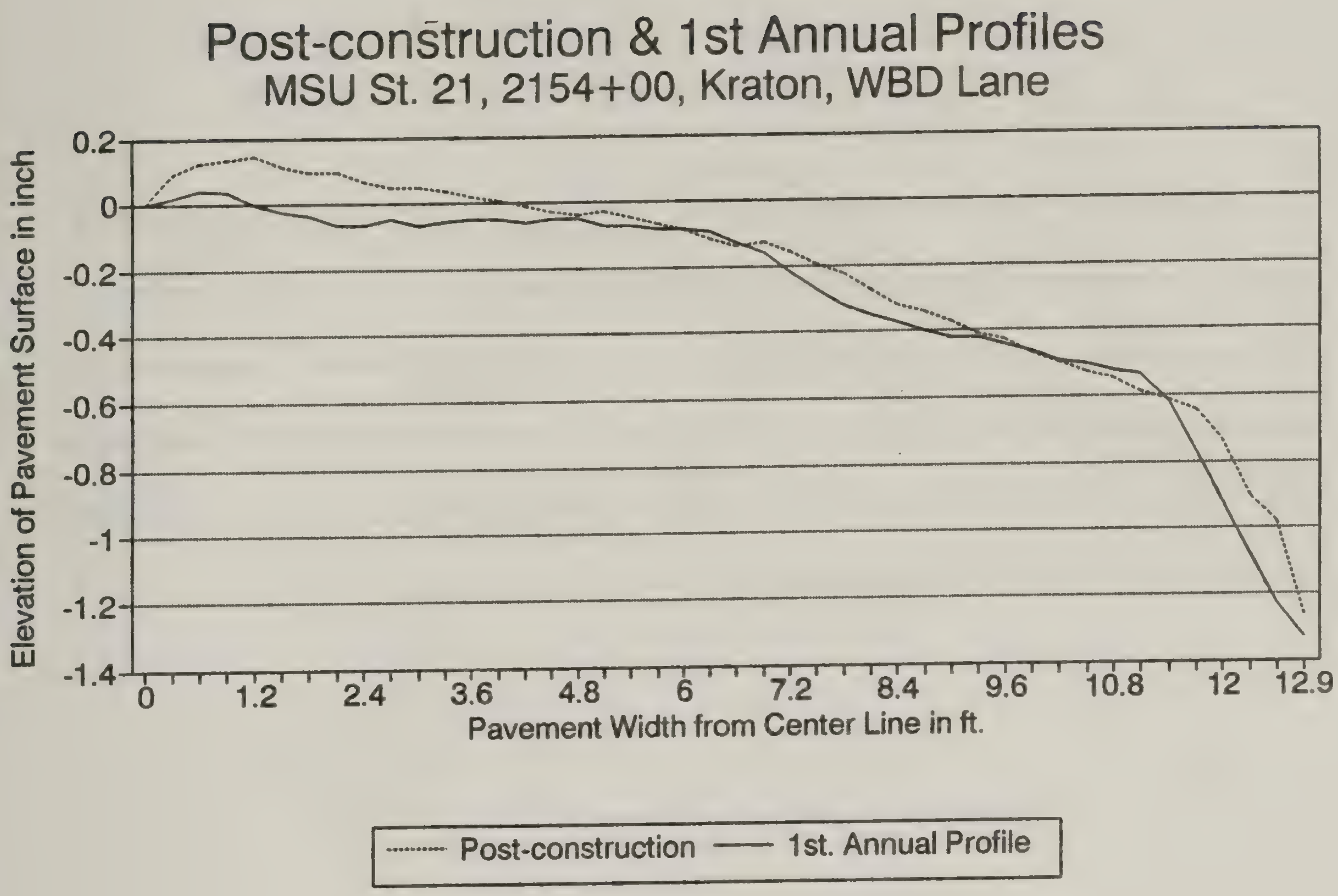
MSU St. 18, 2170+00, Kraton, WBD Lane

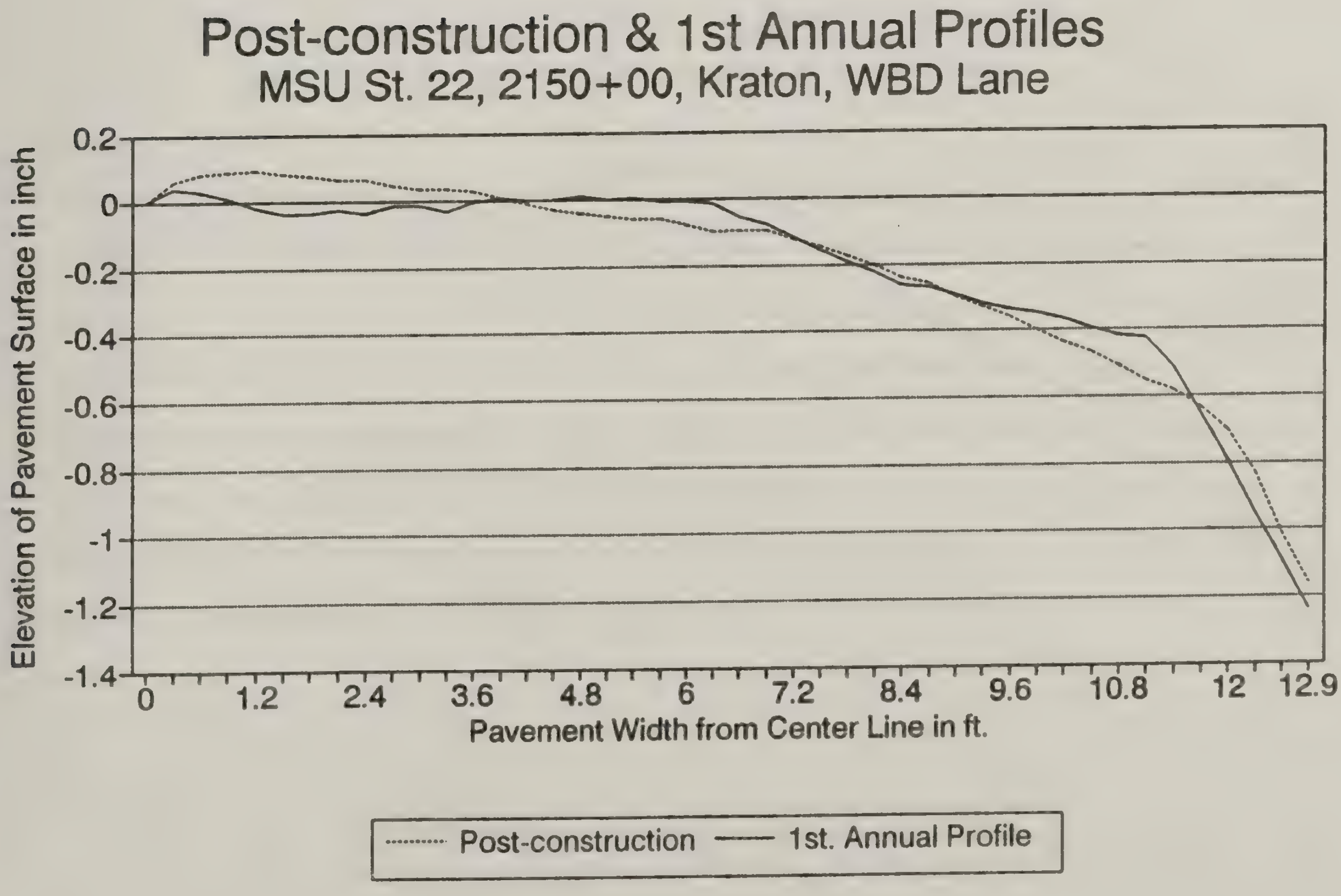


Post-construction & 1st Annual Profiles
MSU St. 19, 2164+00, Kraton, WBD Lane

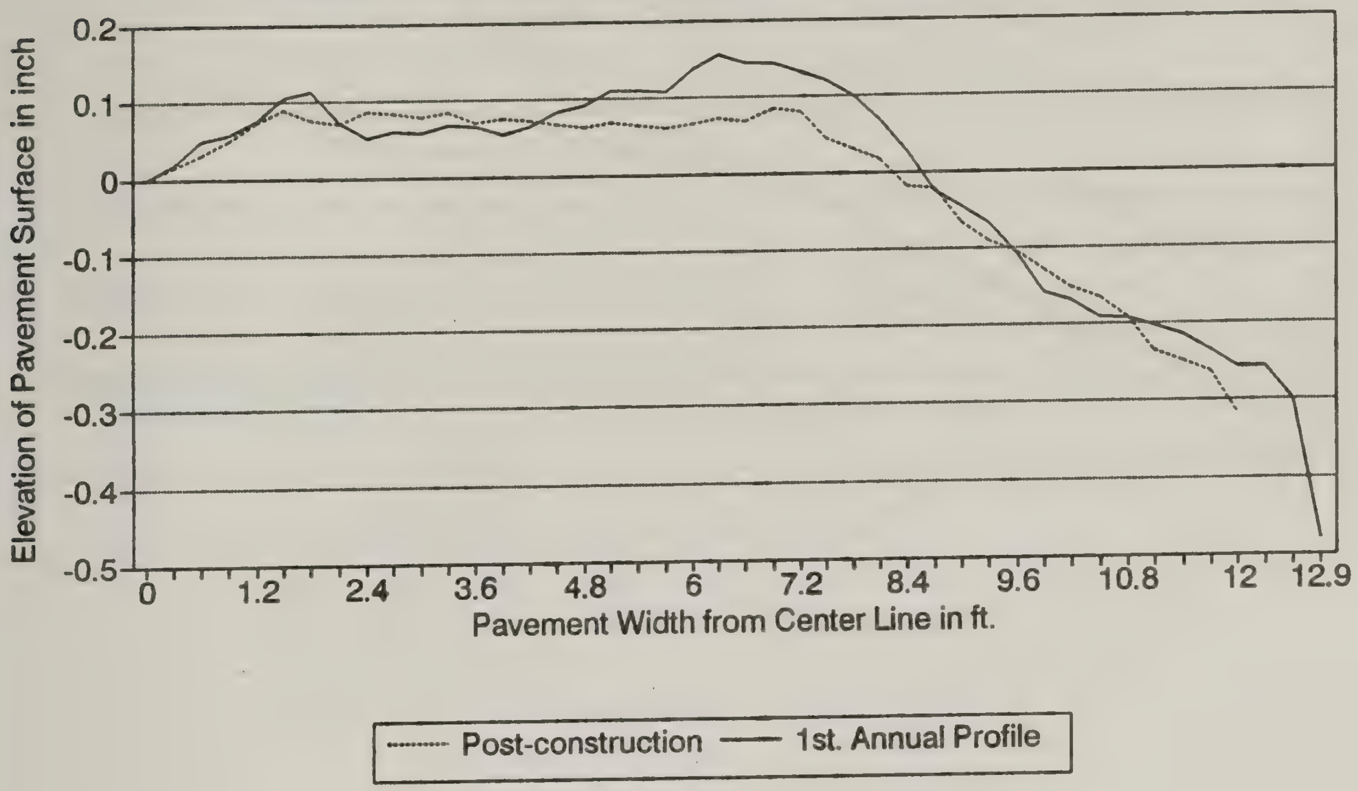


Post-construction & 1st Annual Profiles
MSU St. 20, 2160+00, Kraton, WBD Lane

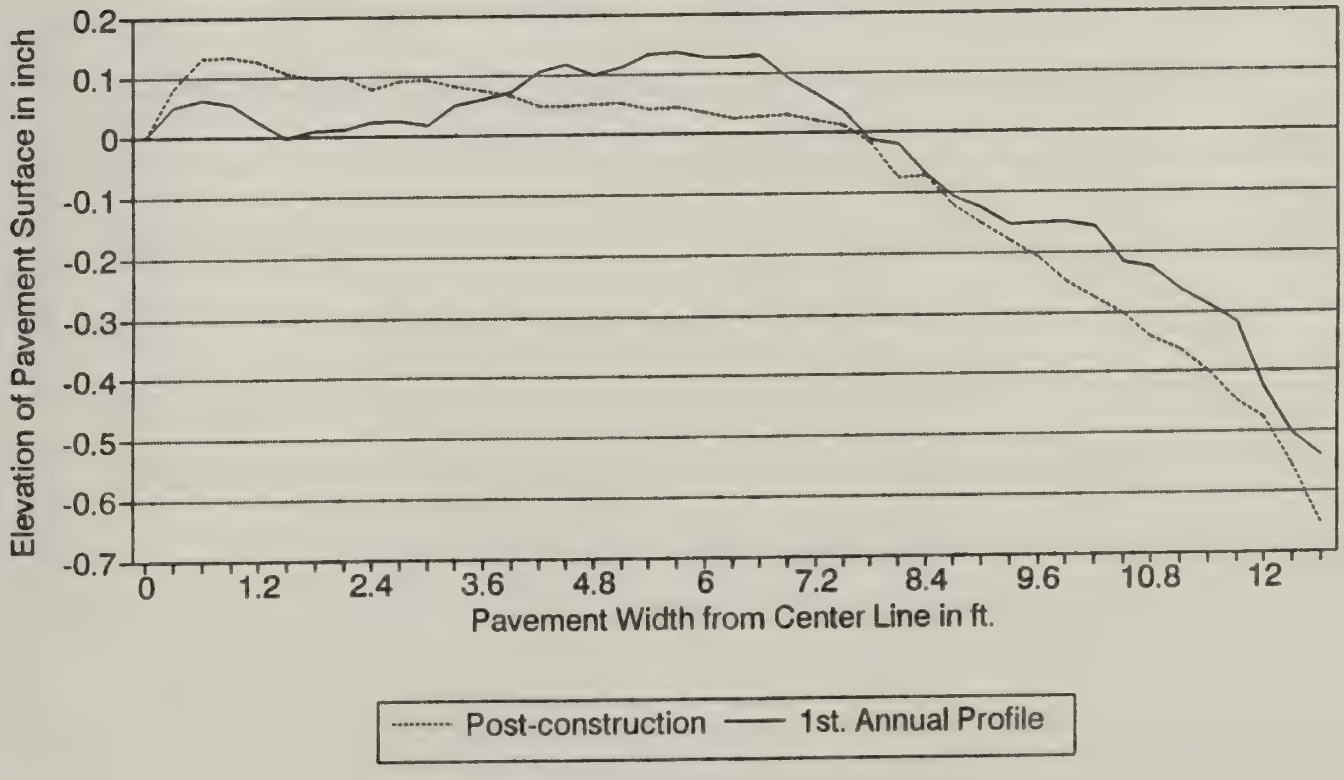

Post-construction & 1st Annual Profiles
MSU St. 21, 2154+00, Kraton, WBD Lane
Elevation of Pavement Surface in inch
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
-1.2
-1.4
0
1.2
2.4
3.6
4.8
6
7.2
8.4
9.6
10.8
12
12.9
Pavement Width from Center Line in ft.
Post-construction
1st. Annual Profile

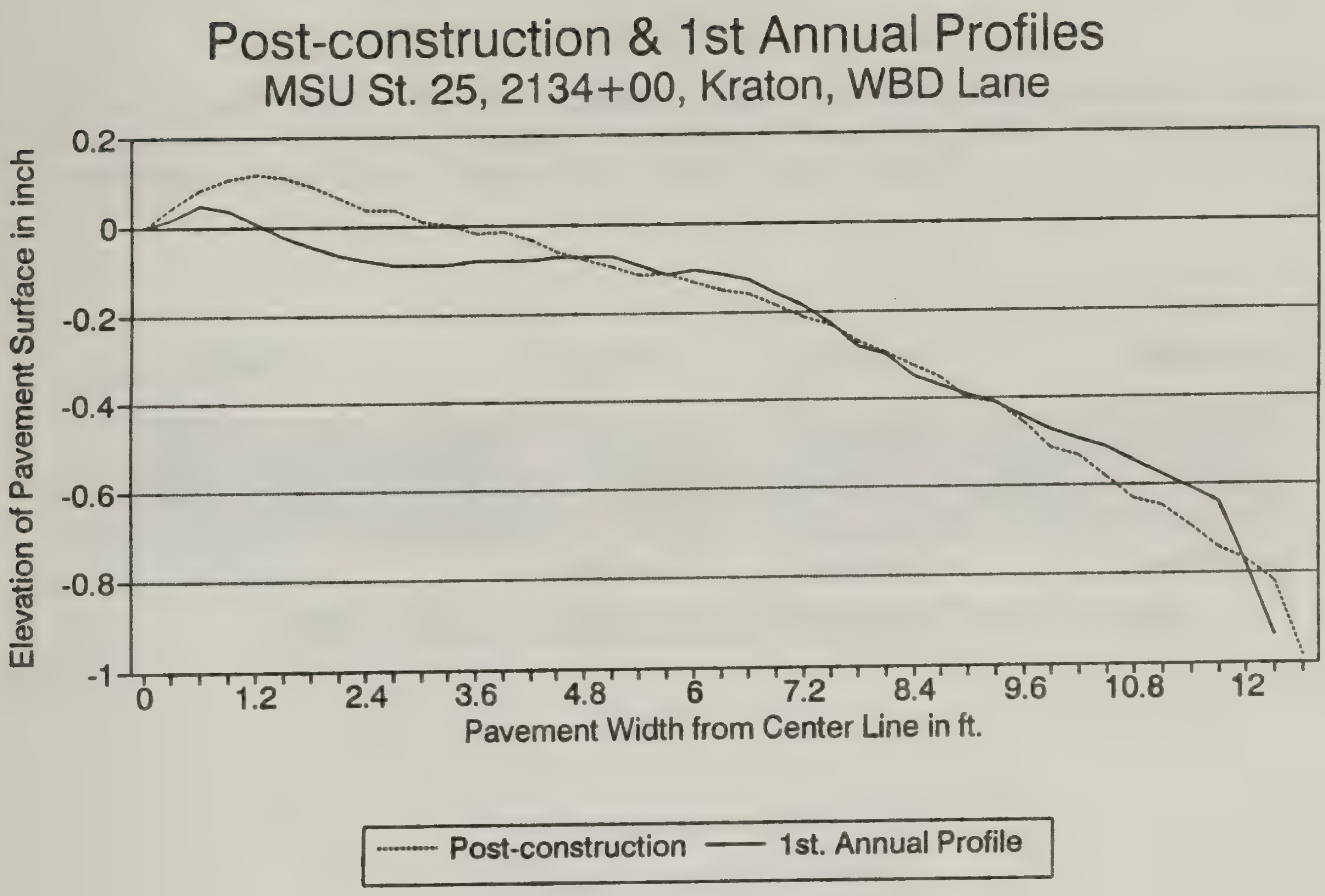

Post-construction & 1st Annual Profiles
MSU St. 22, 2150+00, Kraton, WBD Lane
Elevation of Pavement Surface in inch
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
-1.2
-1.4
0
1.2
2.4
3.6
4.8
6
7.2
8.4
9.6
10.8
12
12.9
Pavement Width from Center Line in ft.
Post-construction
1st. Annual Profile

Post-construction & 1st Annual Profiles
MSU St. 23, 2144+00, Kraton, WBD Lane

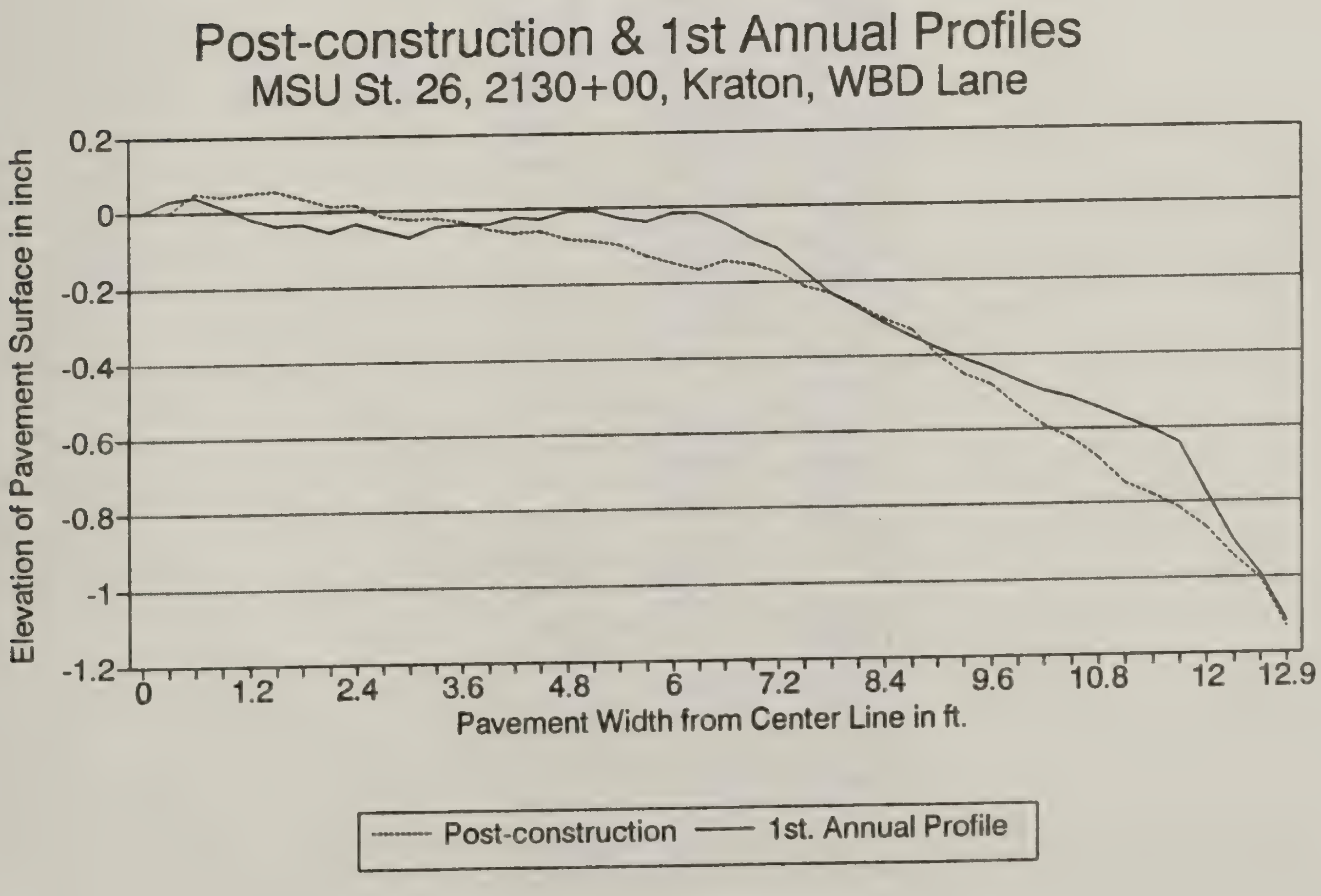


Post-construction & 1st Annual Profiles
MSU St. 24, 2138+00, Kraton, WBD Lane




Post-construction & 1st Annual Profiles

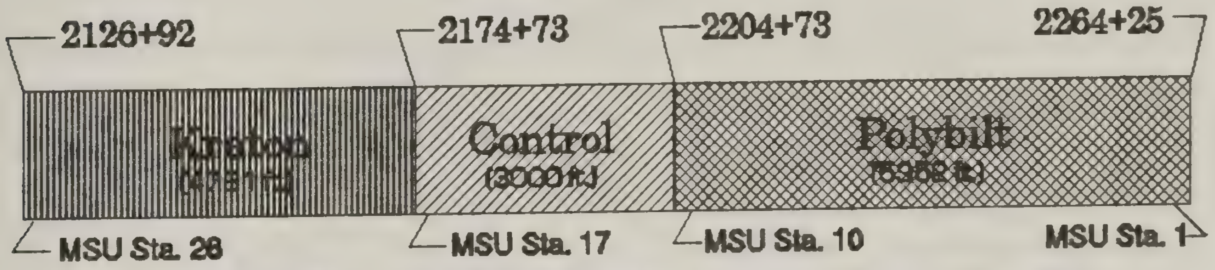
MSU St. 25, 2134+00, Kraton, WBD Lane


Post-construction & 1st Annual Profiles

MSU St. 26, 2130+00, Kraton, WBD Lane

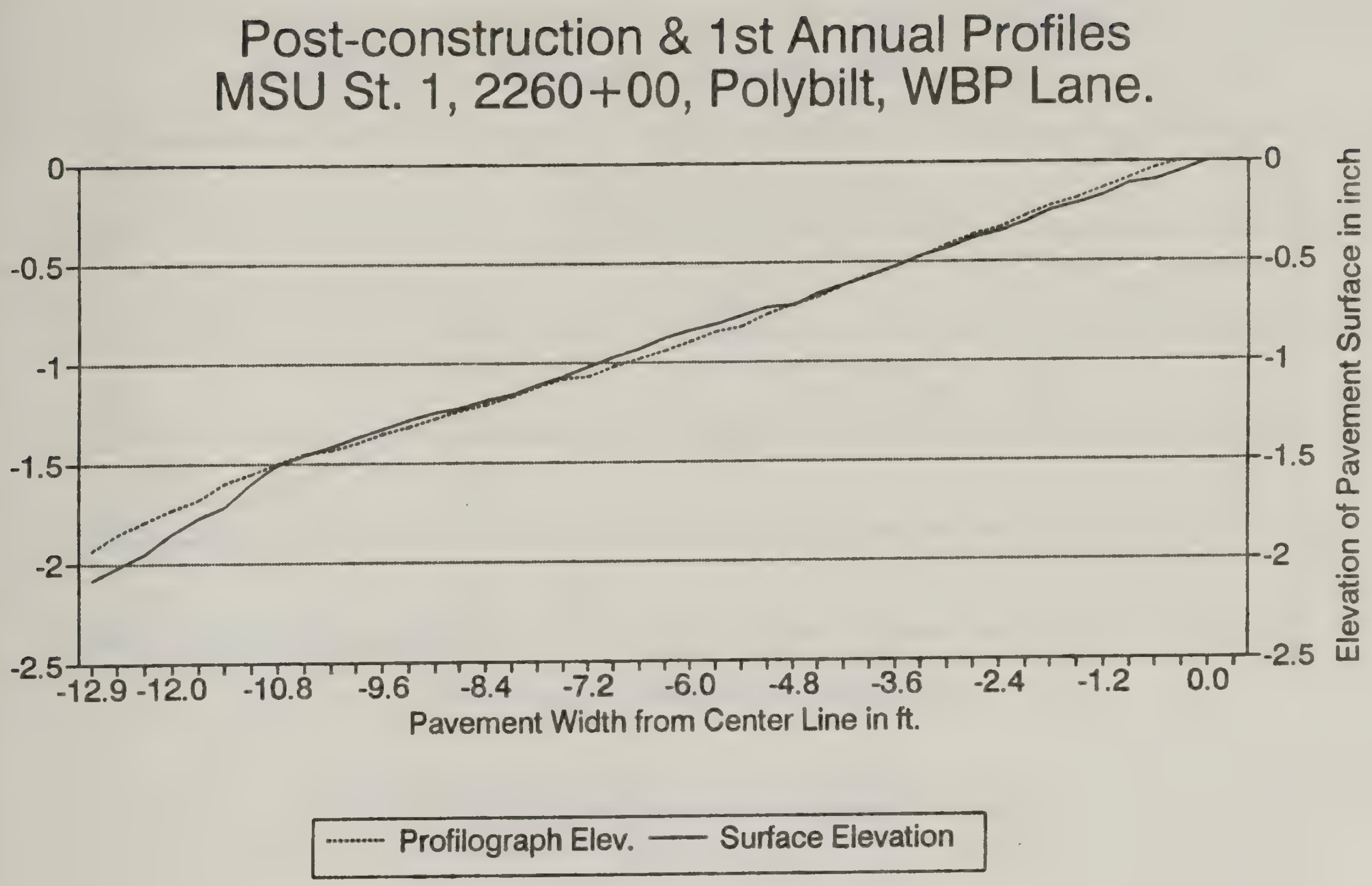
Appendix E

-Plots of the First Annual and Post-construction Pavement Profiles of West Bound Passing Lane by MSU Station Number, Highway Station Number and Modifier Used

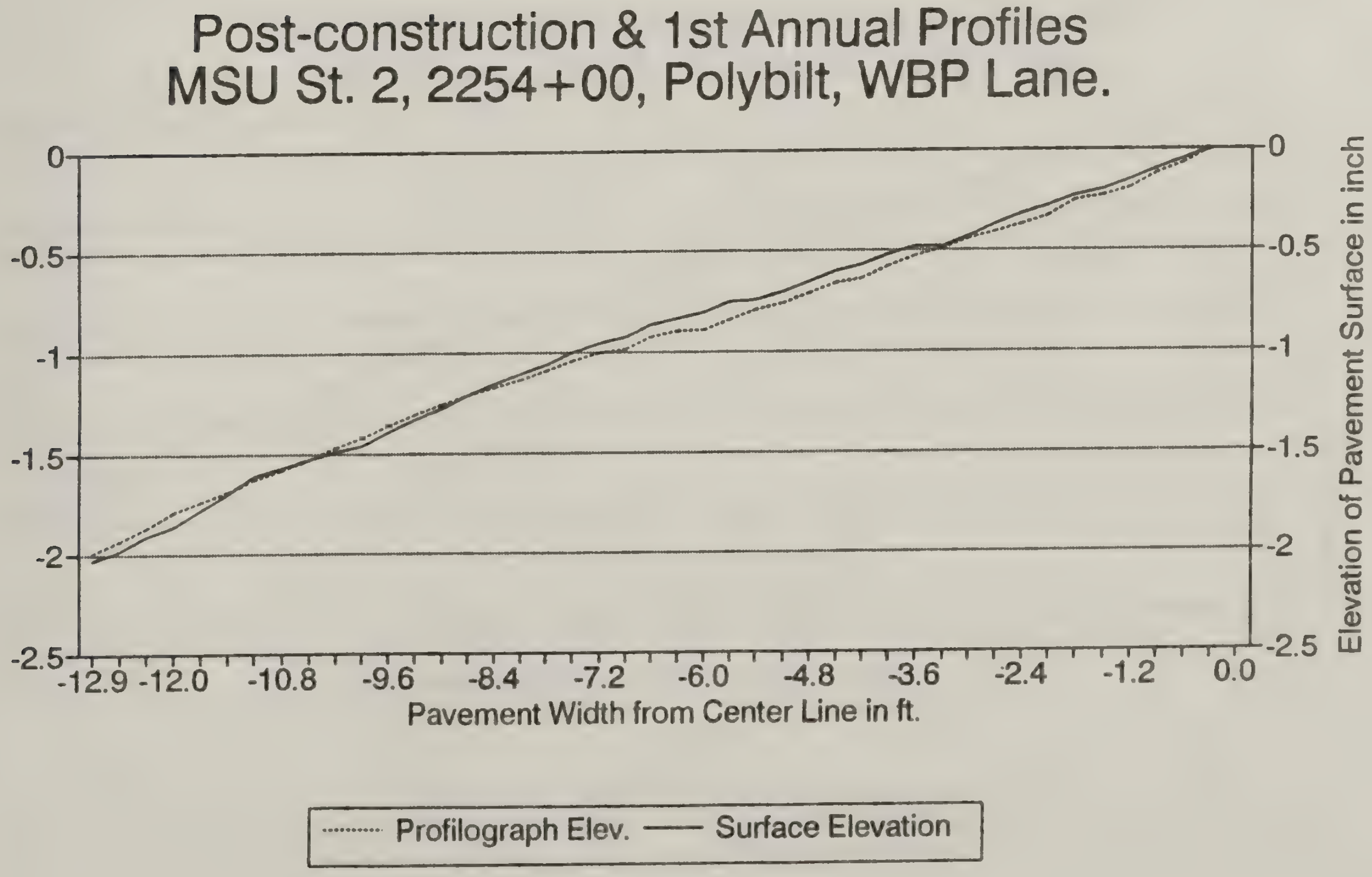


West Bound Field Experimental Test Section

MSU Station Number	Highway Station	Section by Binder Used
1	2260+00	Polybilt
2	2254+00	Polybilt
3	2250+00	Polybilt
4	2244+00	Polybilt
5	2238+00	Polybilt
6	2232+00	Polybilt
7	2226+00	Polybilt
8	2220+00	Polybilt
9	2214+00	Polybilt
10	2208+00	Polybilt
11	2200+00	Exxon
12	2196+00	Exxon
13	2192+00	Exxon
14	2188+00	Exxon
15	2184+00	Exxon
16	2180+00	Exxon
17	2176+00	Exxon
18	2170+00	Kraton
19	2164+00	Kraton
20	2160+00	Kraton
21	2154+00	Kraton
22	2150+00	Kraton
23	2144+00	Kraton
24	2138+00	Kraton
25	2134+00	Kraton
26	2130+00	Kraton

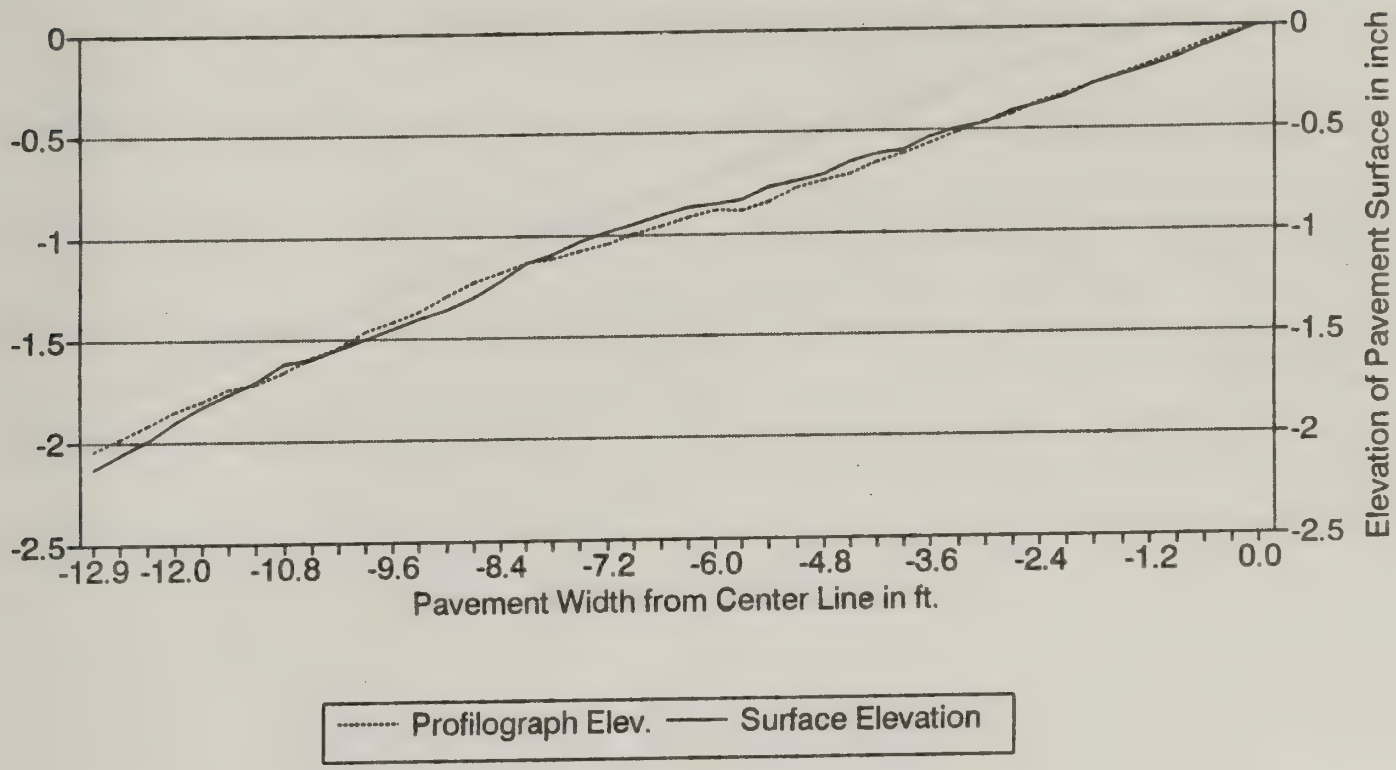


Post-construction & 1st Annual Profiles
MSU St. 1, 2260+00, Polybilt, WBP Lane.

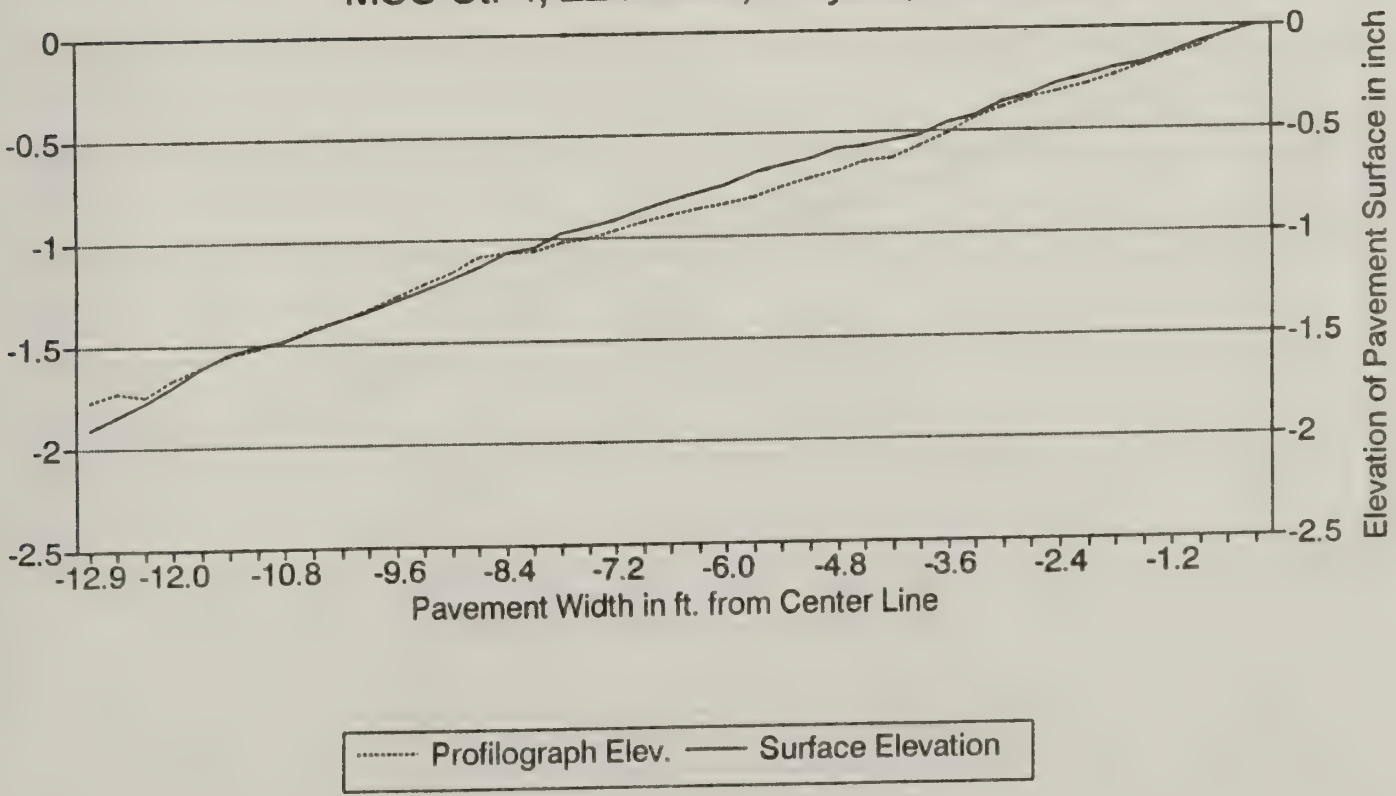


Post-construction & 1st Annual Profiles
MSU St. 2, 2254+00, Polybilt, WBP Lane.

Post-construction & 1st Annual Profiles
MSU St. 3, 2250+00, Polybilt, WBP Lane.

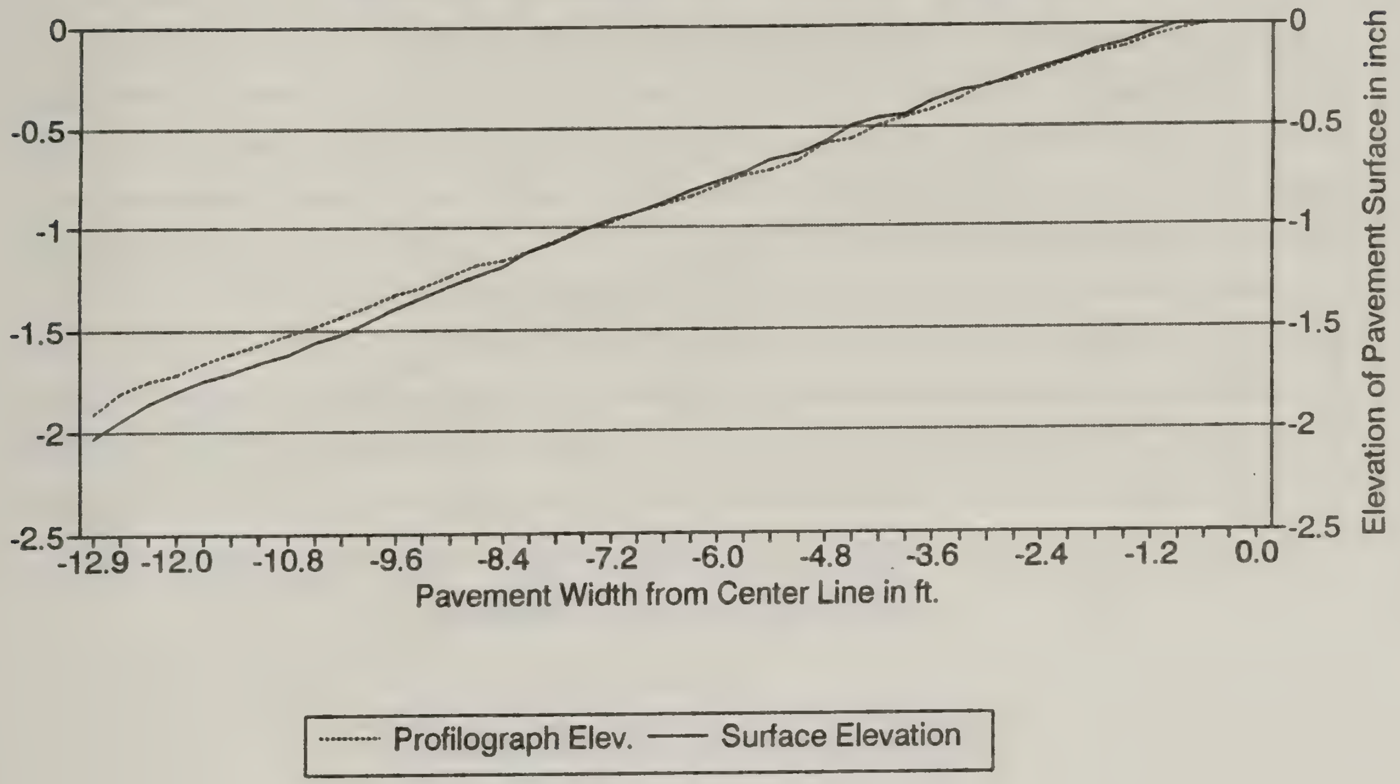


Post-construction & 1st Annual Profiles
MSU St. 4, 2244+00, Polybilt, WBP Lane.



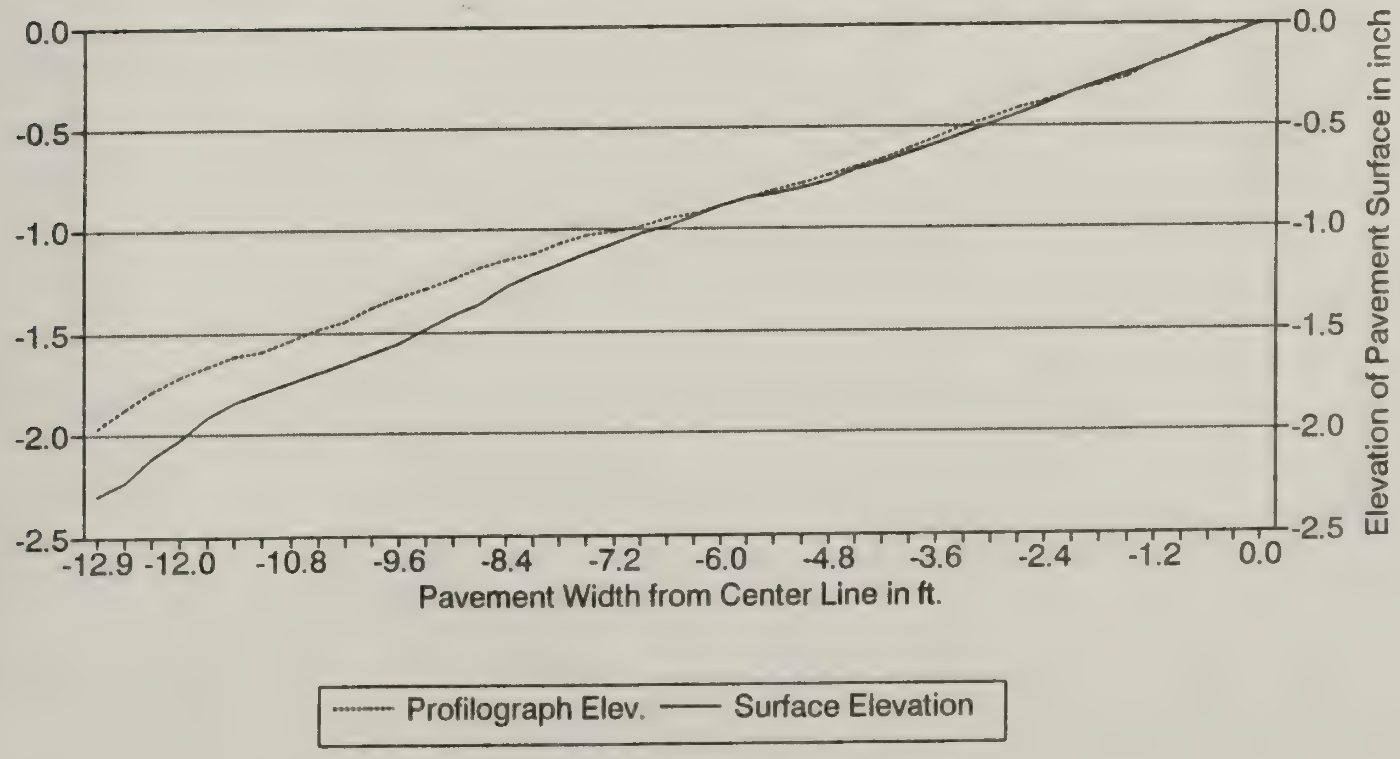
Post-construction & 1st Annual Profiles

MSU St. 5, 2238+00, Polybilt, WBP Lane.

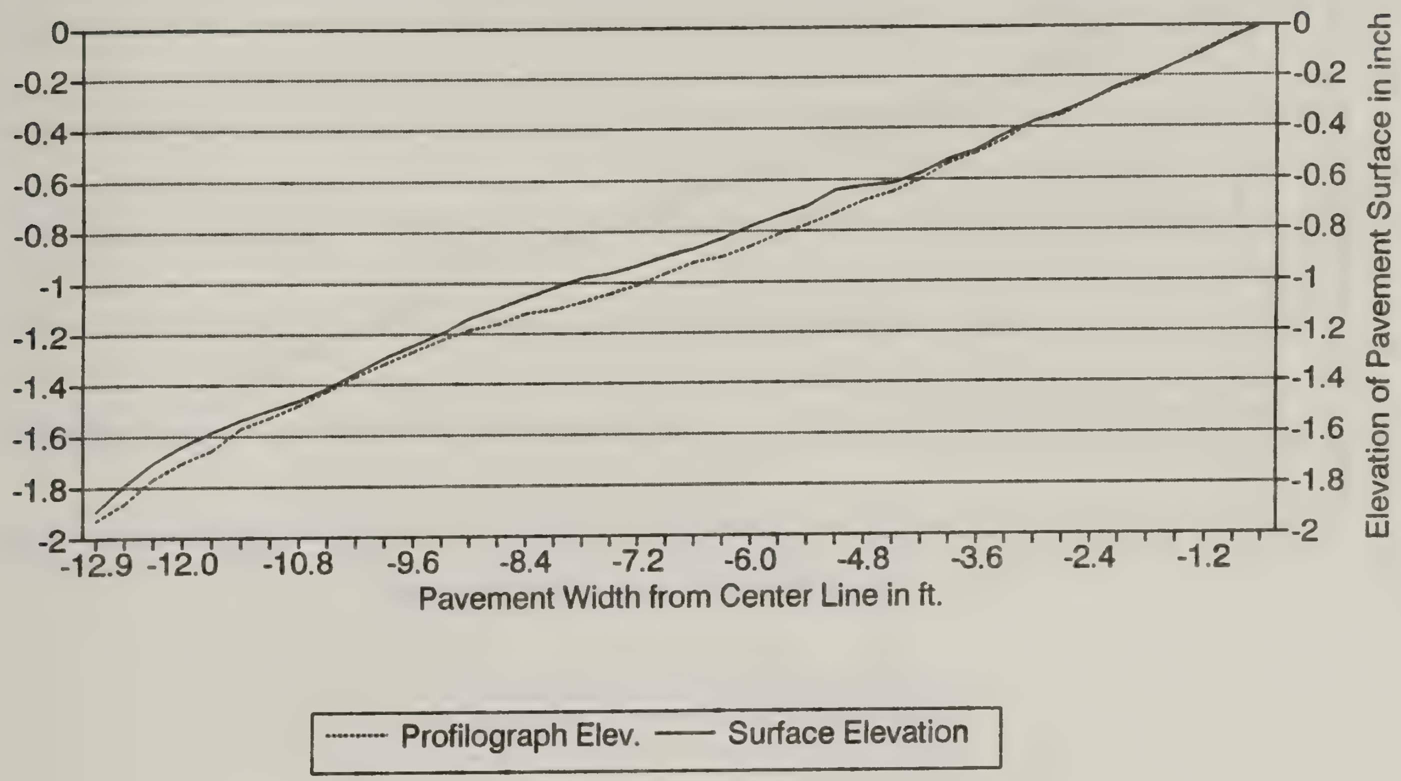


Post-construction & 1st Annual Profiles

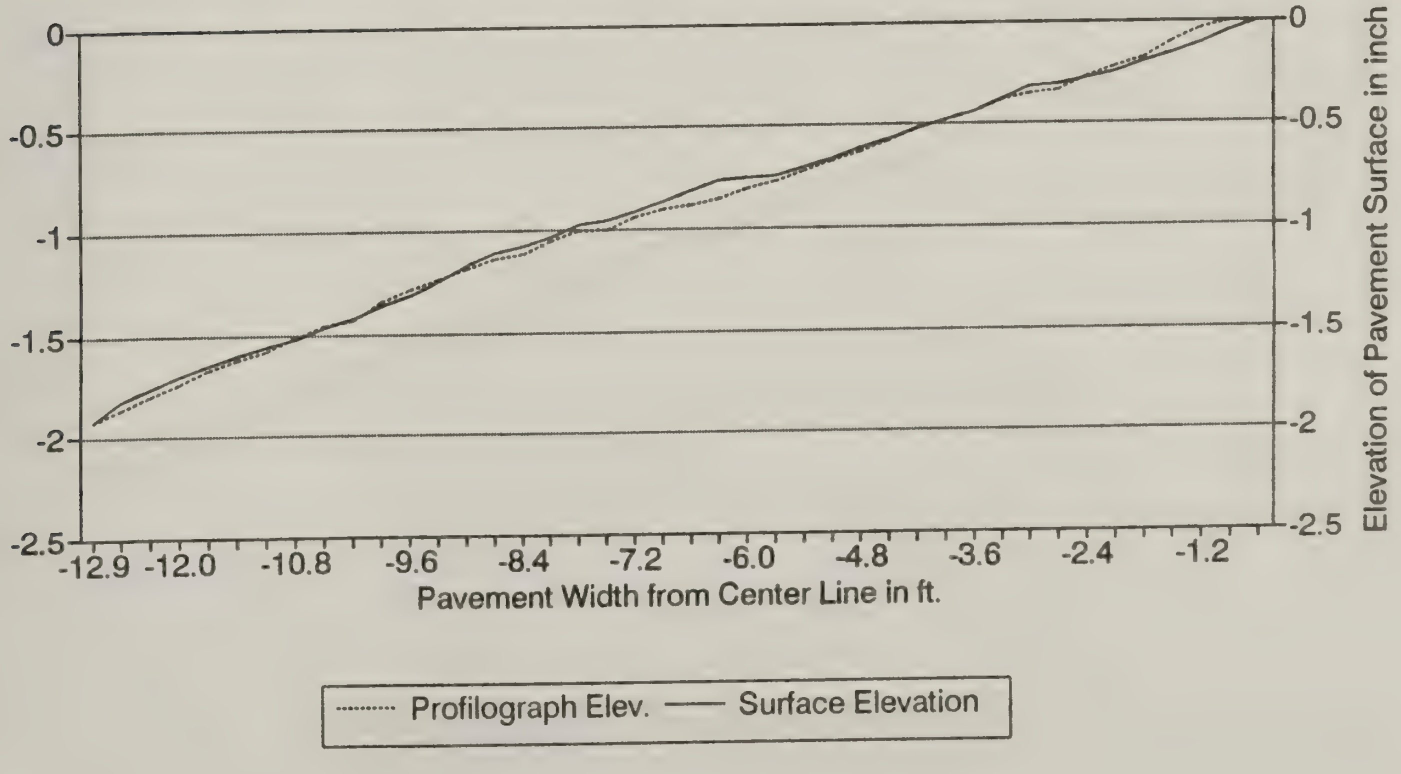
MSU St. 6, 2232+00, Polybilt, WBP Lane.



Post-construction & 1st Annual Profiles
MSU St. 7, 2226+00, Polybilt, WBP Lane.

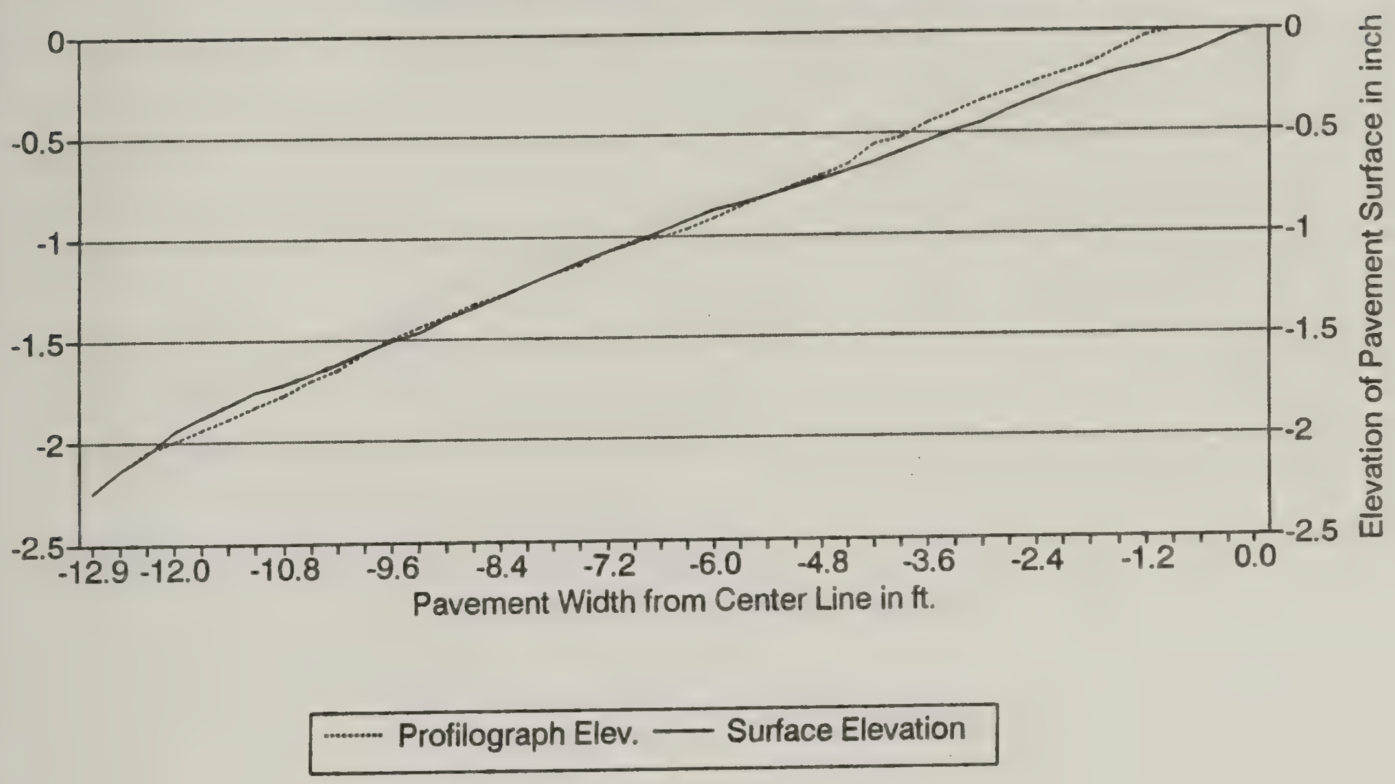


Post-construction & 1st. Annual Profile
MSU St. 8, 2220+00, Polybilt, WBP Lane.



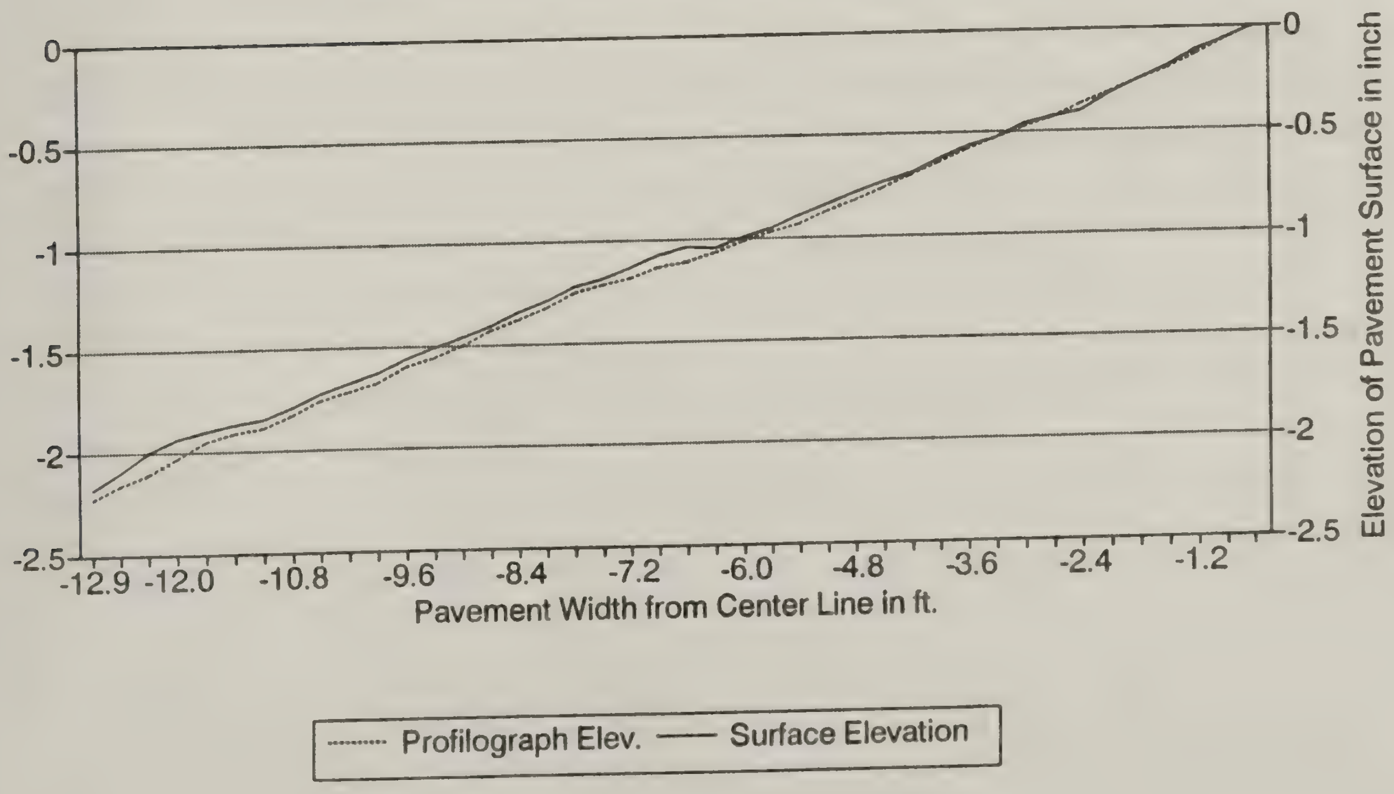
Post-construction & 1st. Annual Profile

MSU St. 9, 2214+00, Polybilt, WBP Lane.

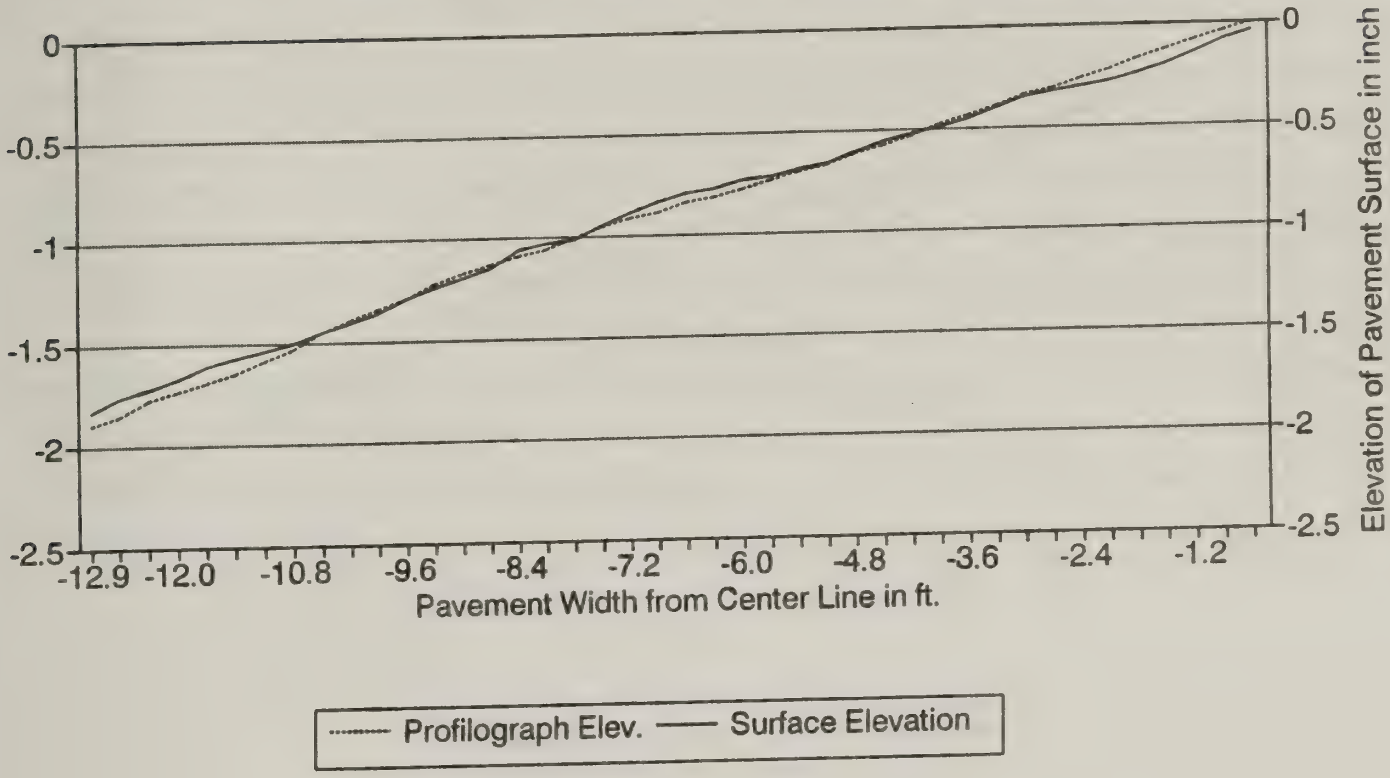


Post-construction & 1st Annual Profiles

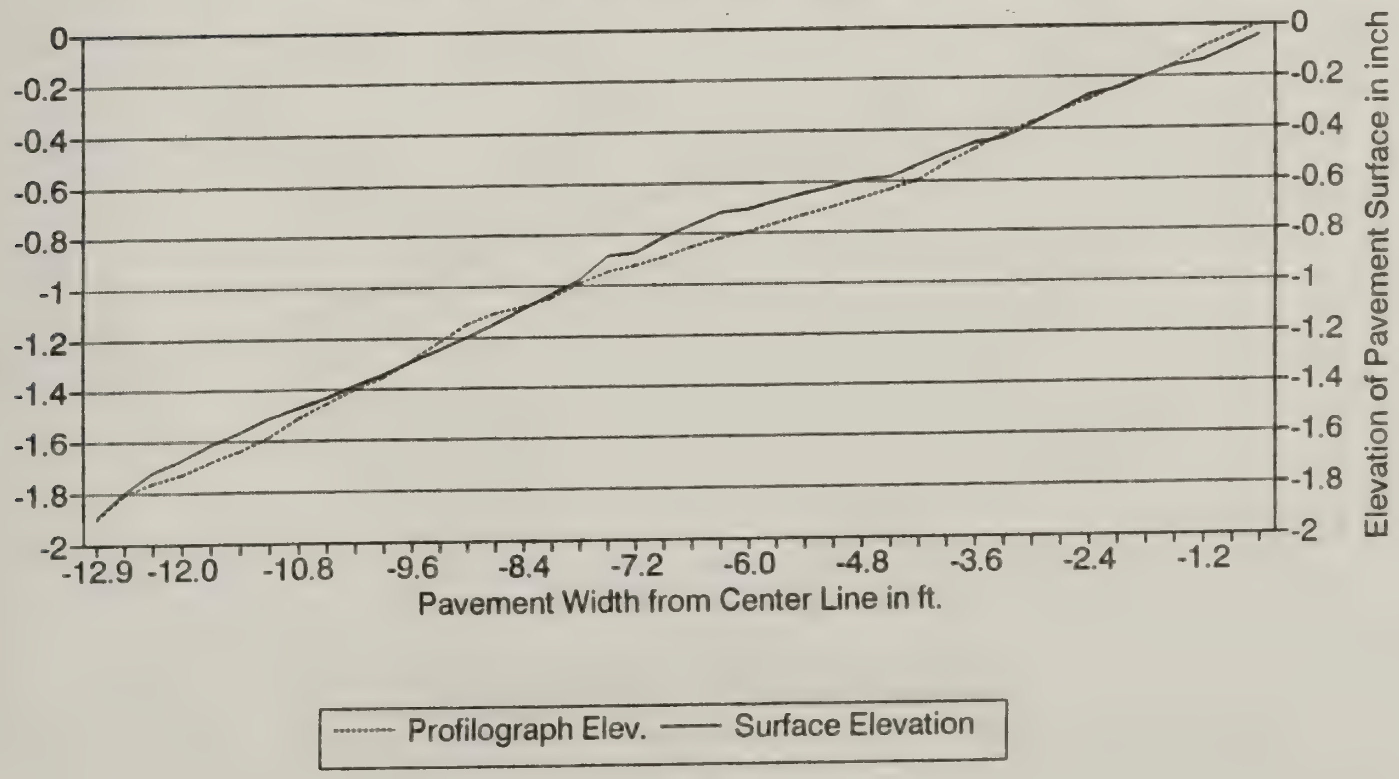
MSU St. 10, 2208+00, Polybilt, WBP Lane



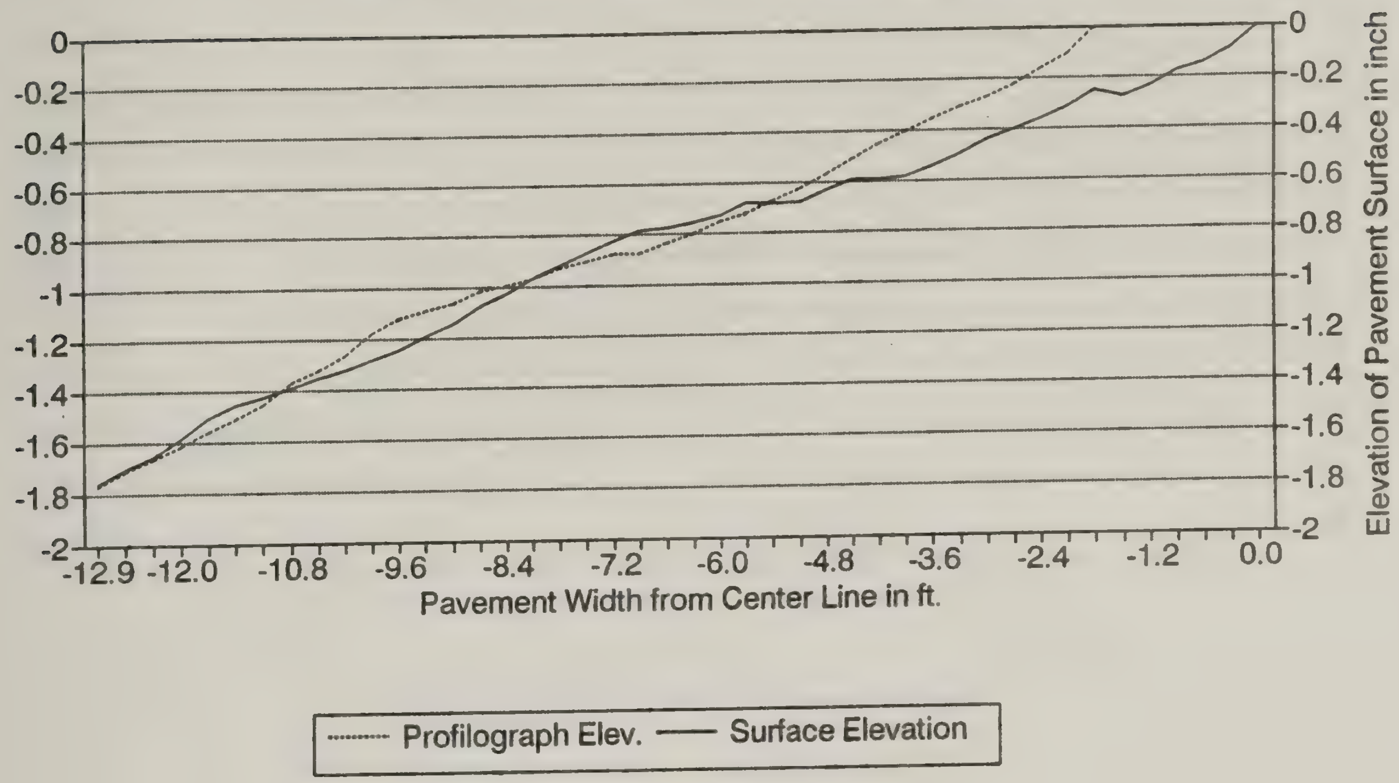
Post-construction & 1st Annual Profiles
MSU St. 11, 2200+00, Control, WBP Lane



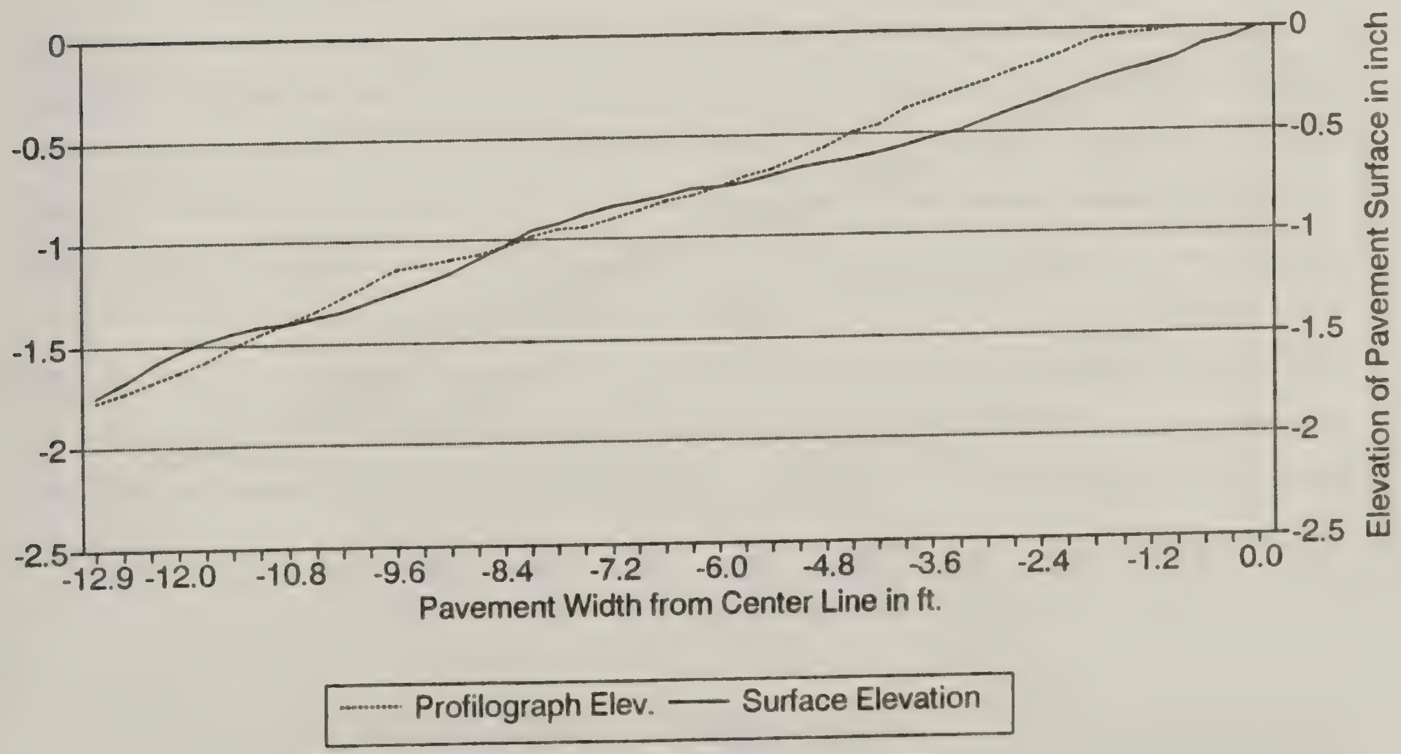
Post-construction & 1st. Annual Profile
MSU St. 12, 2196+00, Control, WBP Lane

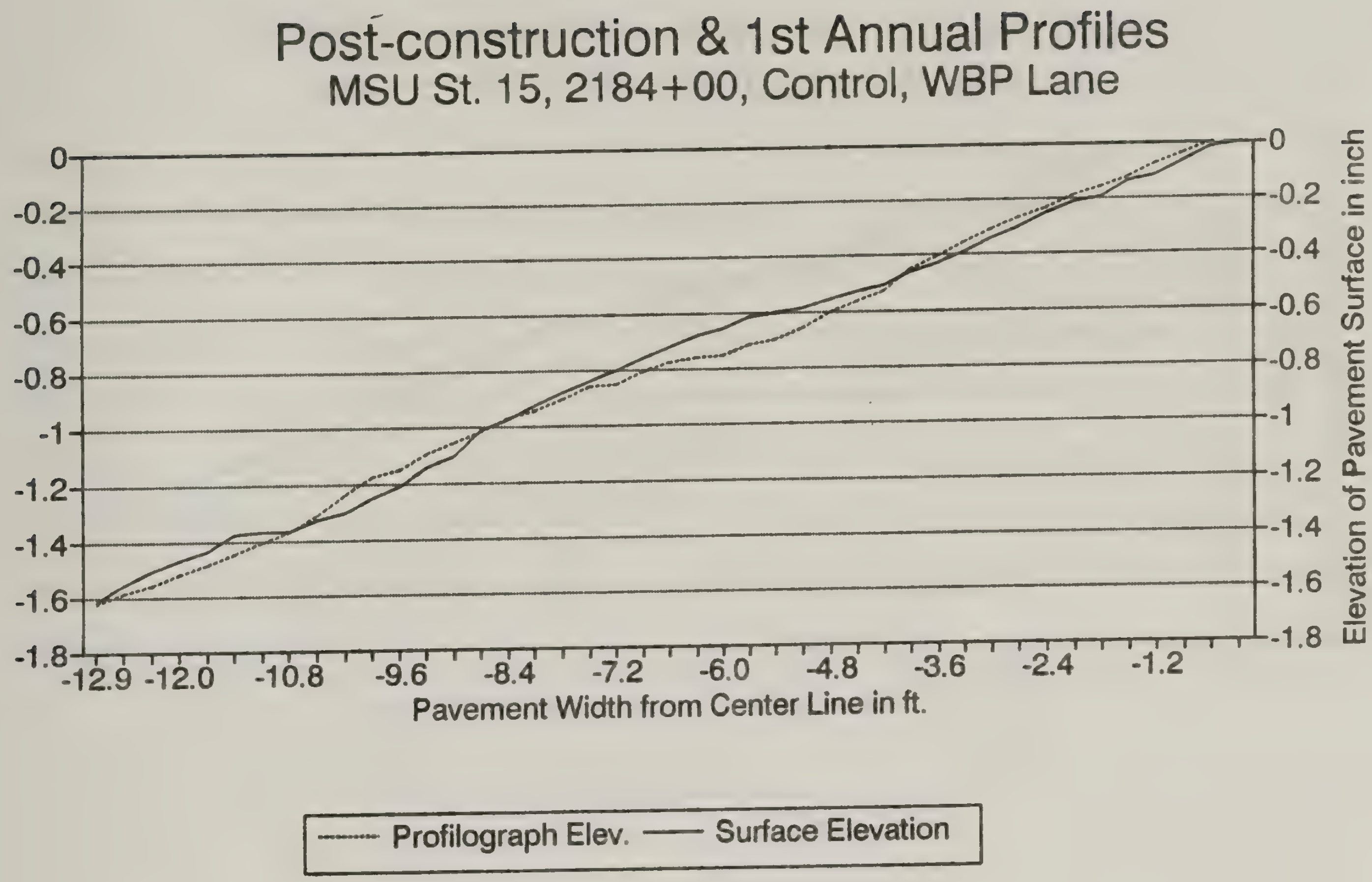


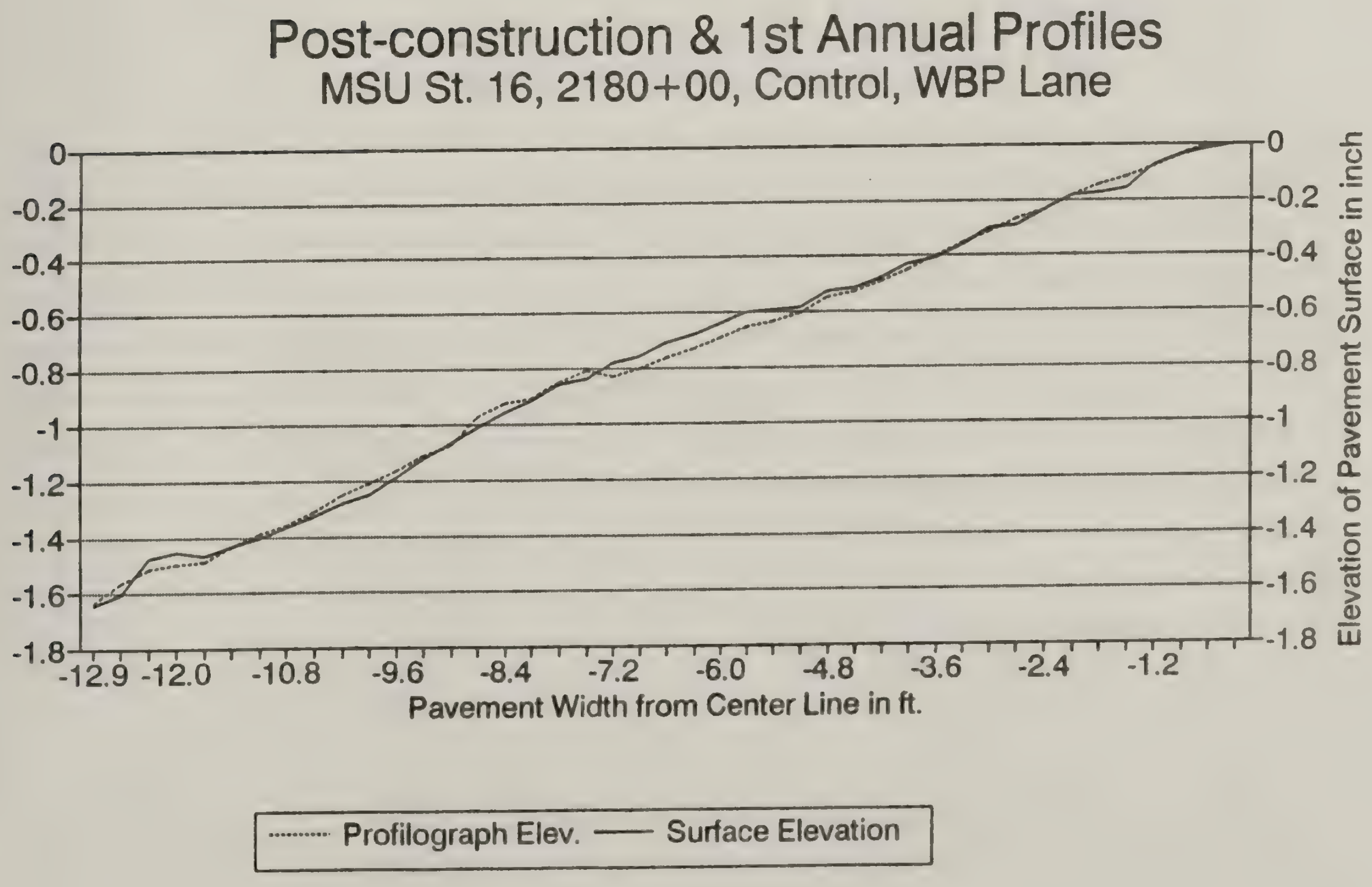
Post-construction & 1st Annual Profiles
MSU St. 13, 2192+00, Control, WBP Lane



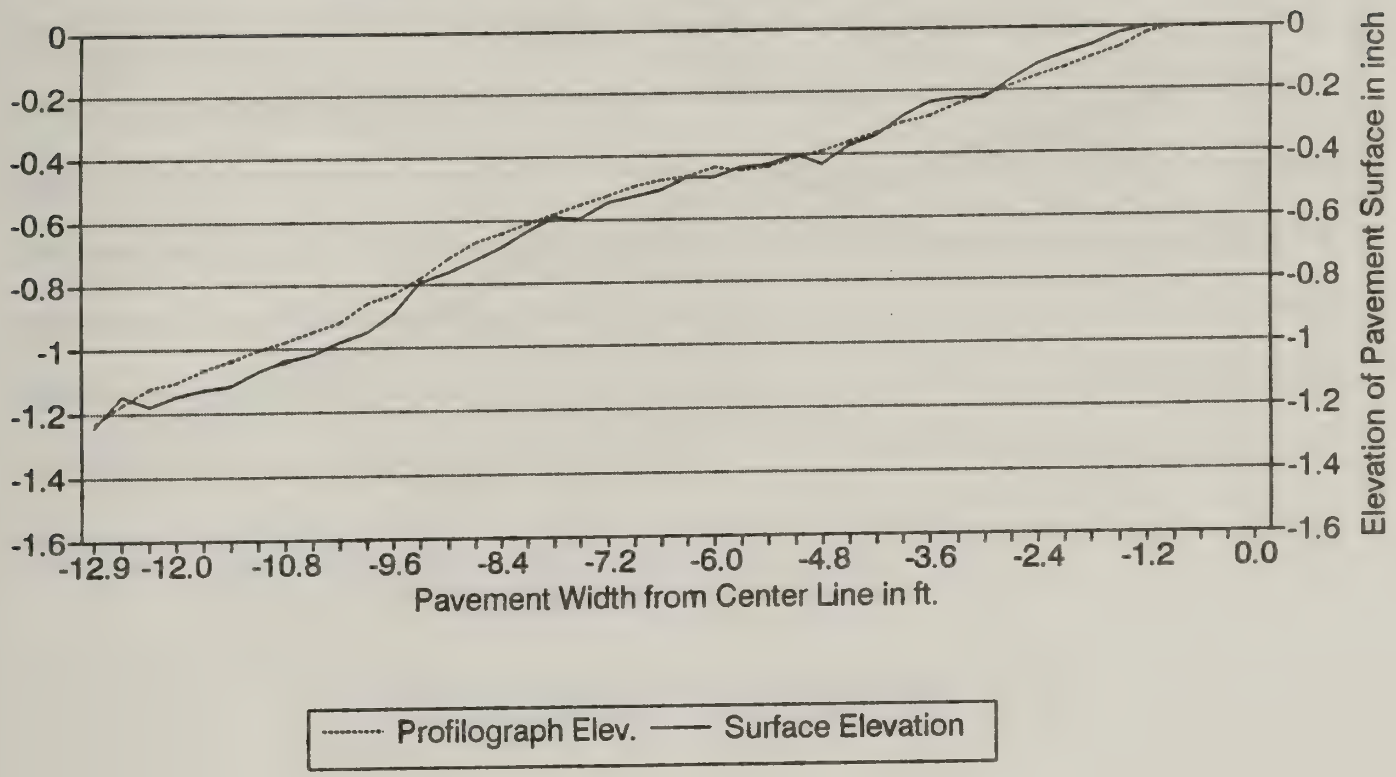
Post-construction & 1st Annual Profiles
MSU St. 14, 2188+00, Control, WBP Lane



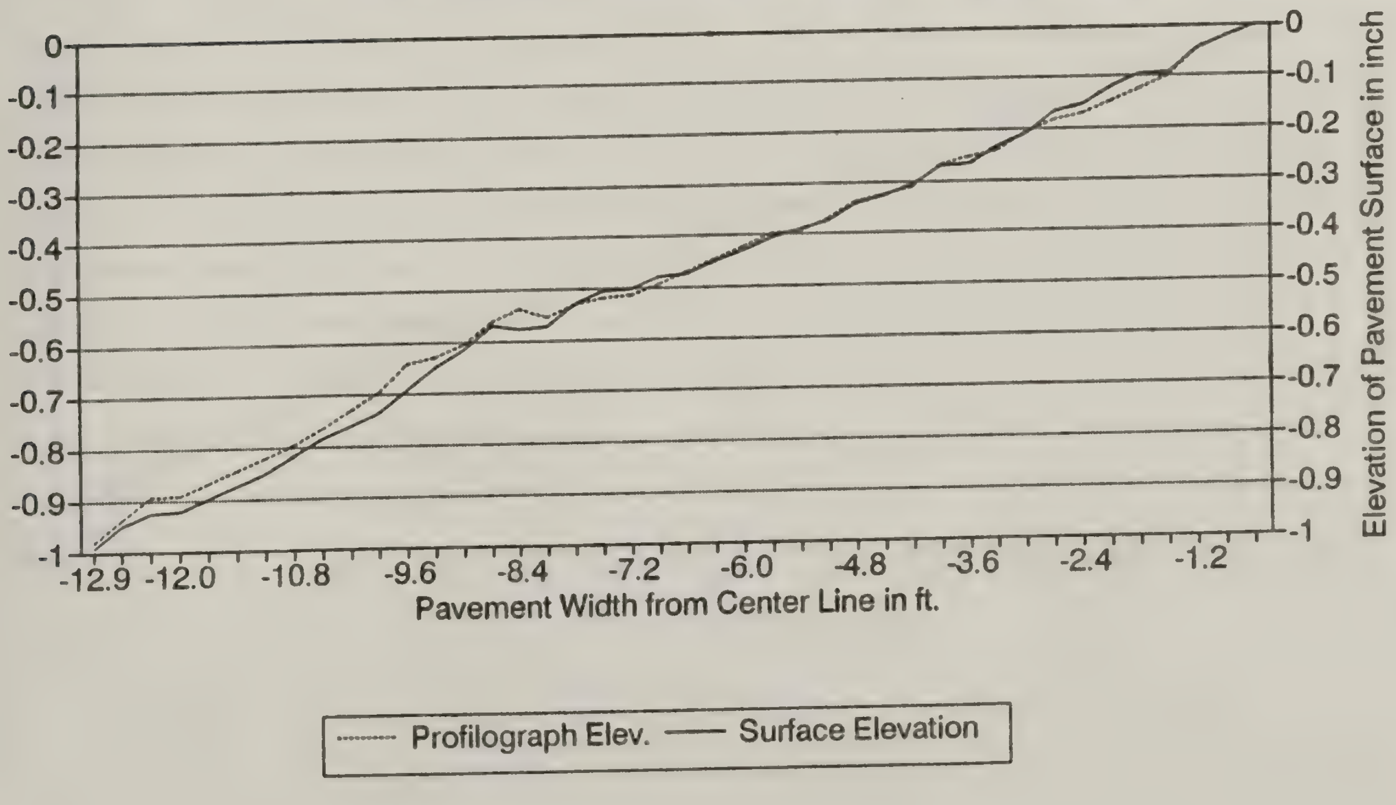

Post-construction & 1st Annual Profiles
MSU St. 15, 2184+00, Control, WBP Lane
0
-0.2
-0.4
-0.6
-0.8
-1
-1.2
-1.4
-1.6
-1.8
-12.9
-12.0
-10.8
-9.6
-8.4
-7.2
-6.0
-4.8
-3.6
-2.4
-1.2
Pavement Width from Center Line in ft.
Elevation of Pavement Surface in inch
Profilograph Elev.
Surface Elevation


Post-construction & 1st Annual Profiles
MSU St. 16, 2180+00, Control, WBP Lane
0
-0.2
-0.4
-0.6
-0.8
-1
-1.2
-1.4
-1.6
-1.8
-12.9
-12.0
-10.8
-9.6
-8.4
-7.2
-6.0
-4.8
-3.6
-2.4
-1.2
Pavement Width from Center Line in ft.
Elevation of Pavement Surface in inch
Profilograph Elev.
Surface Elevation

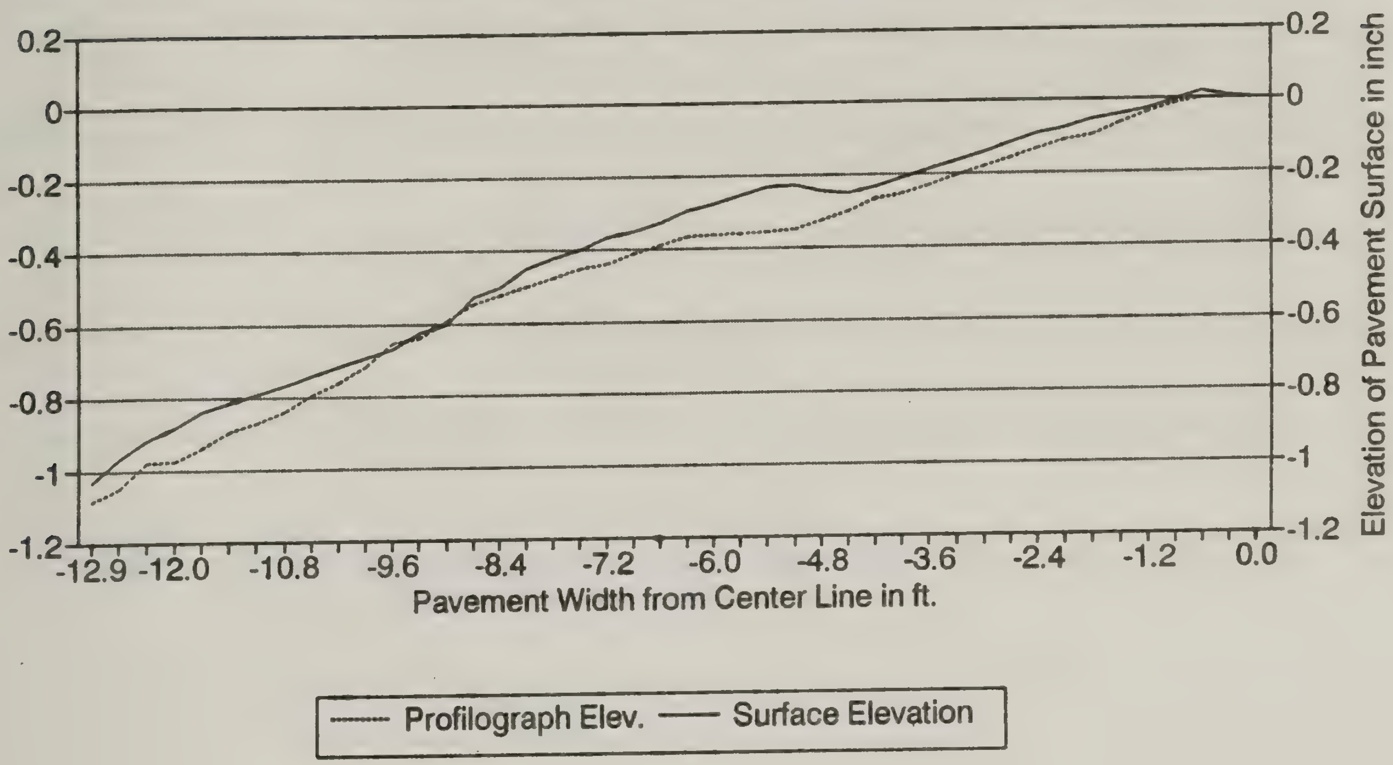
Post-construction & 1st Annual Profiles
MSU St. 17, 2176+00, Control, WBP Lane



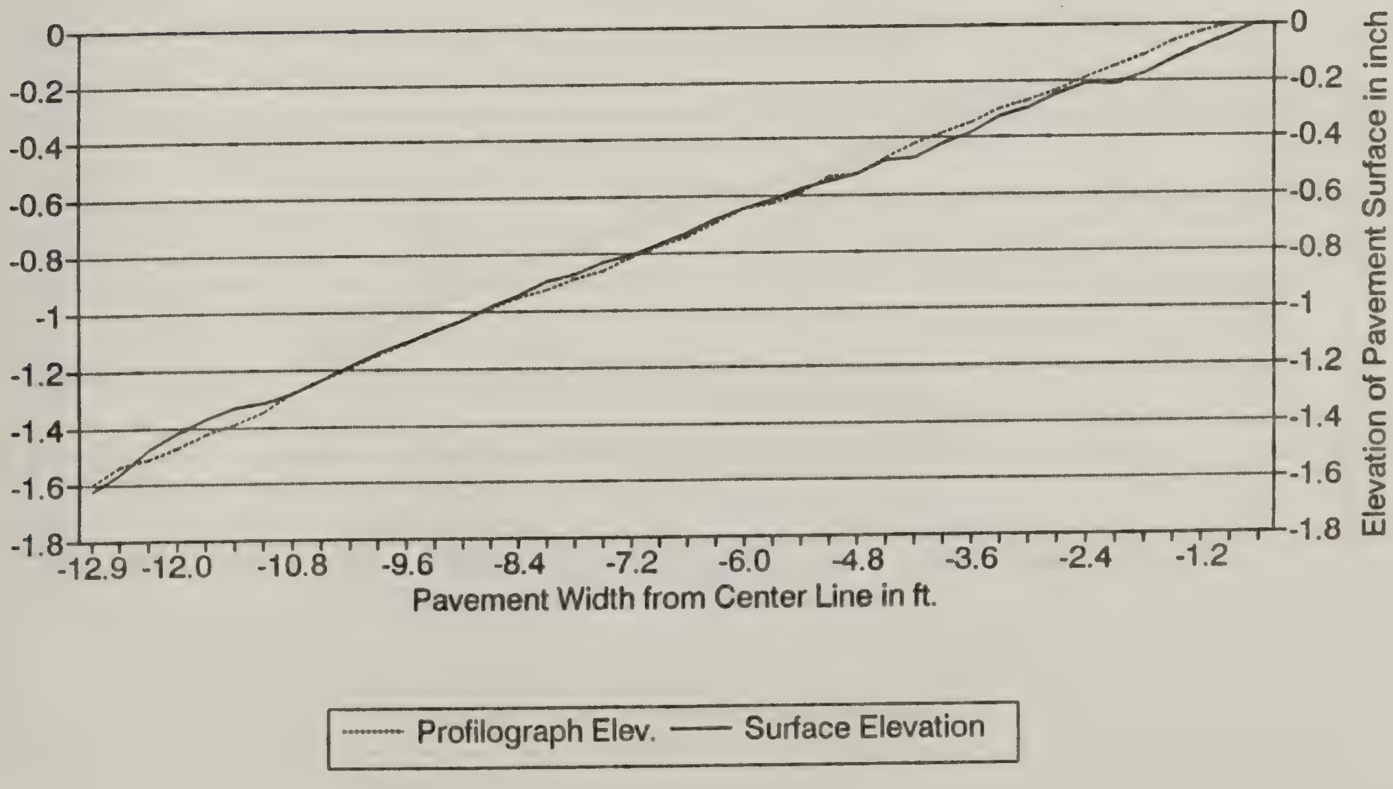
Post-construction & 1st Annual Profiles
MSU St. 18, 2170+00, Kraton, WBP Lane



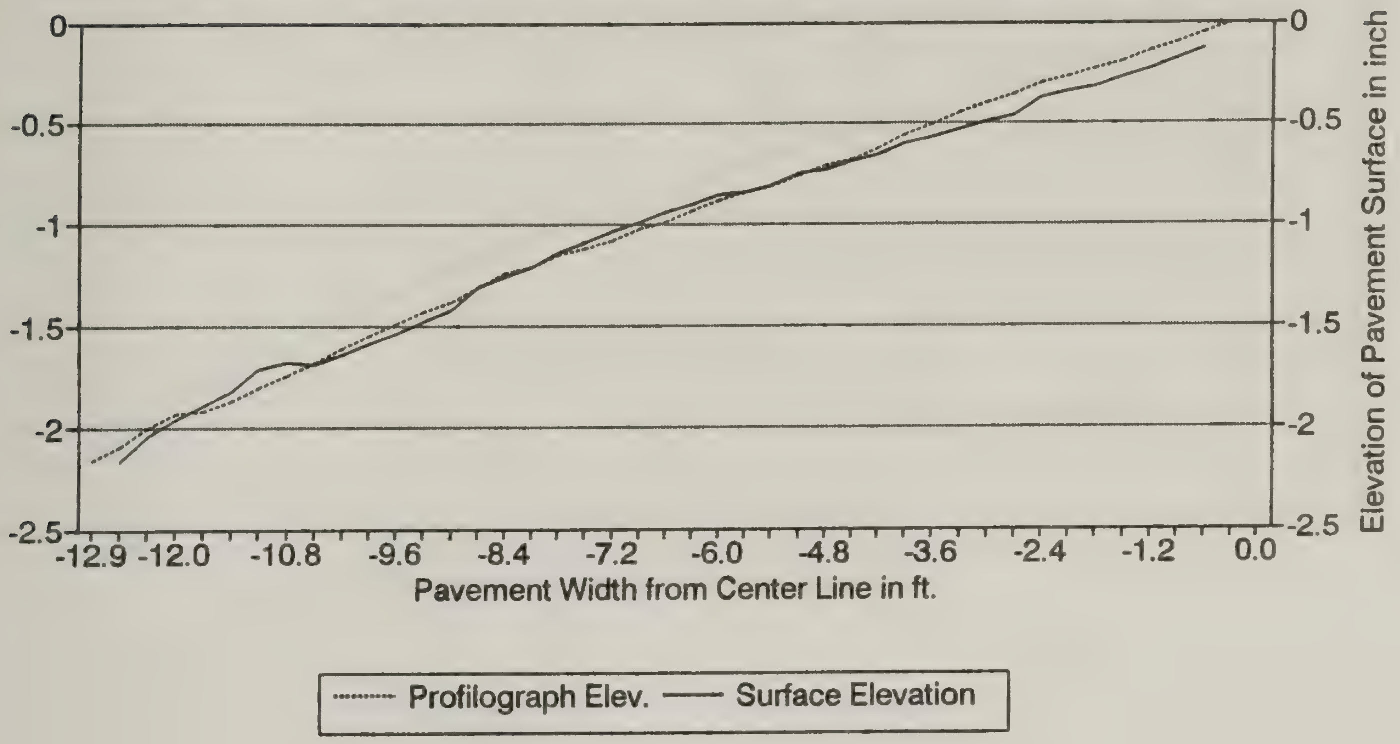
Post-construction & 1st Annual Profiles
MSU St. 19, 2164+00, Kraton, WBP Lane



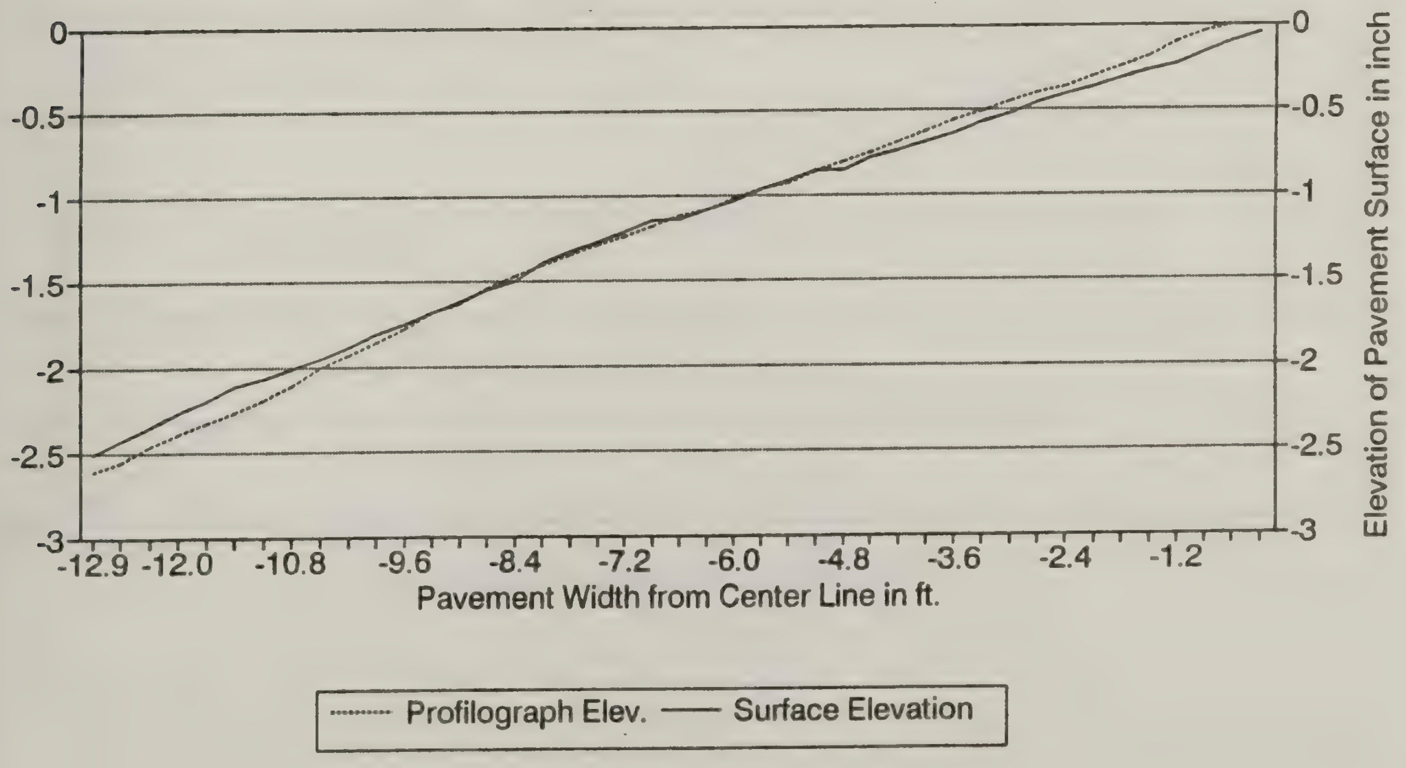
Post-construction & 1st Annual Profiles
MSU St. 20, 2160+00, Kraton, WBP Lane

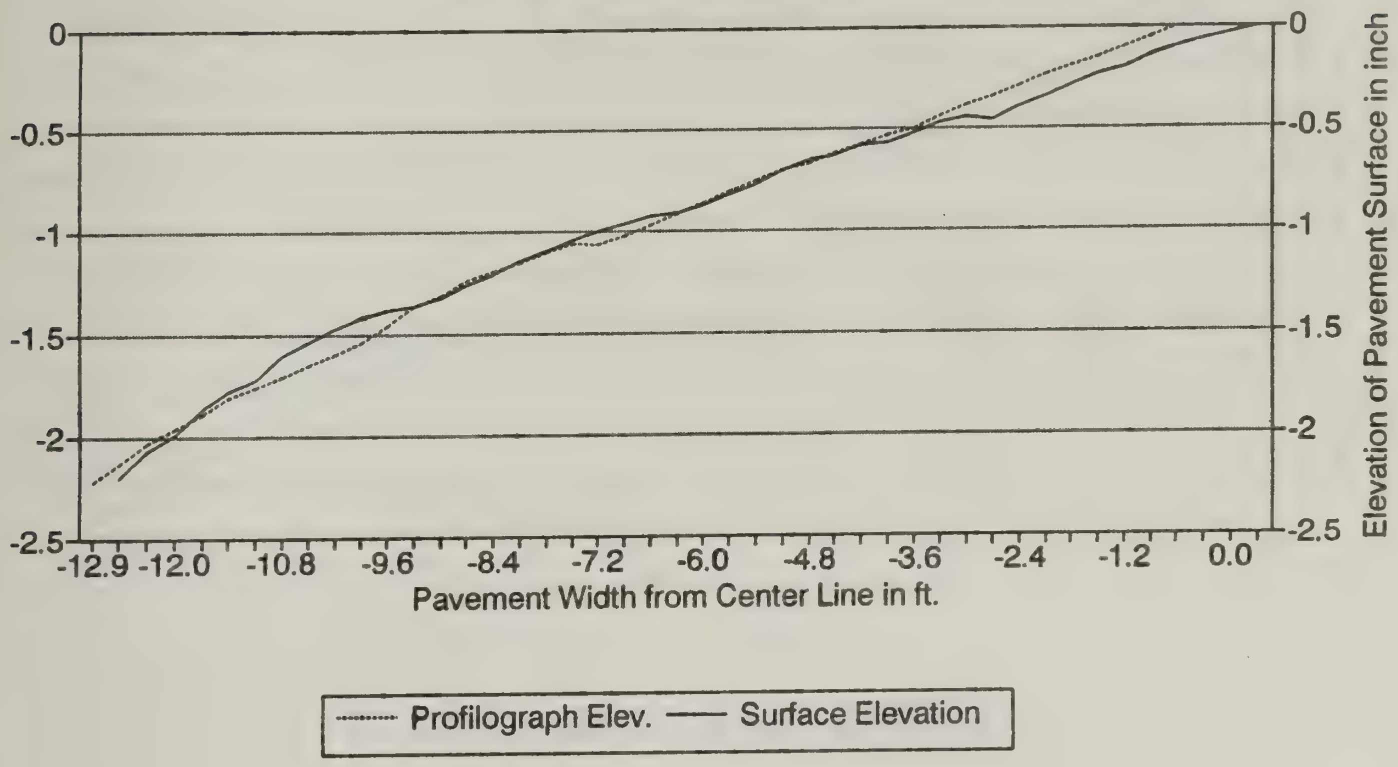


Post-construction & 1st Annual Profiles
MSU St. 21, 2154+00, Kraton, WBP Lane

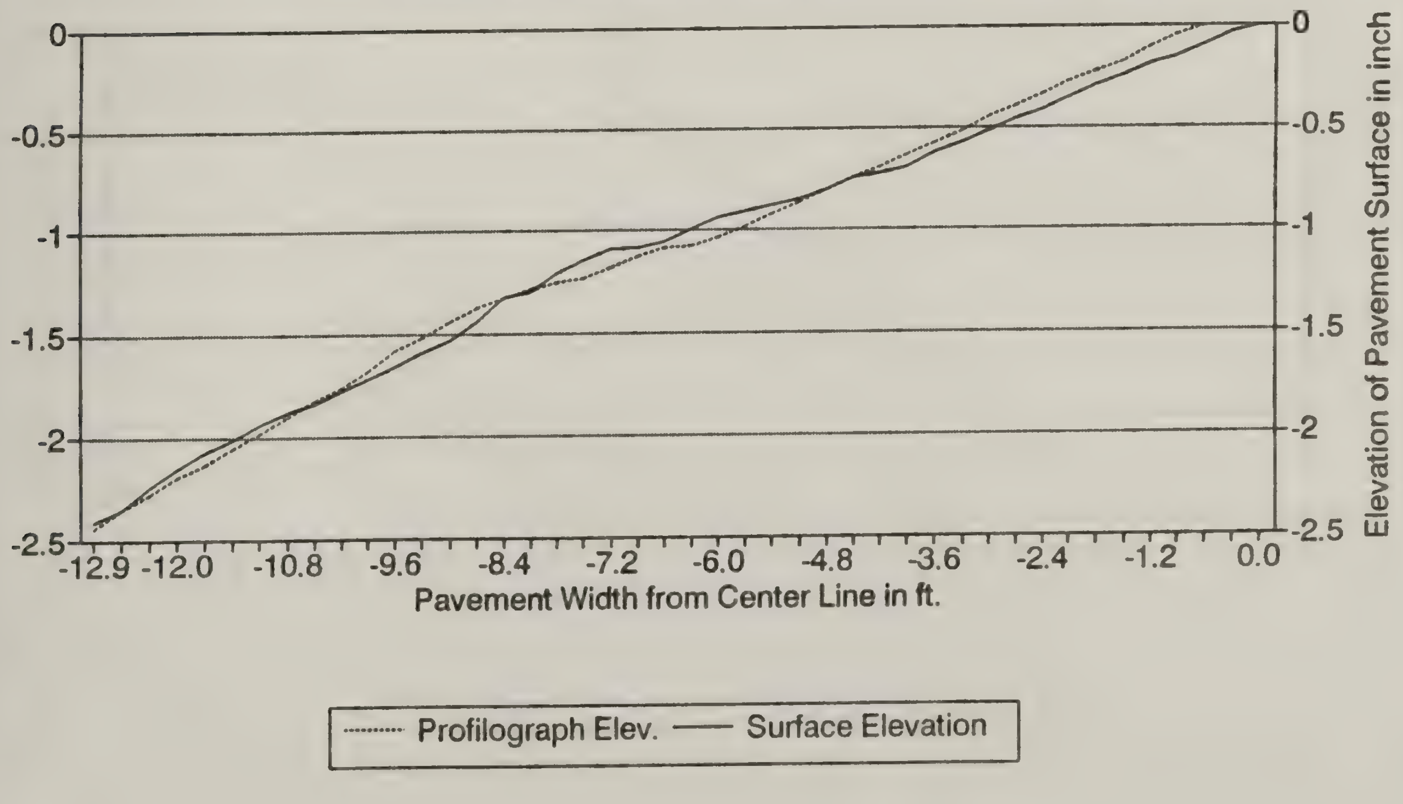


Post-construction & 1st Annual Profiles
MSU St. 22, 2150+00, Kraton, WBP Lane



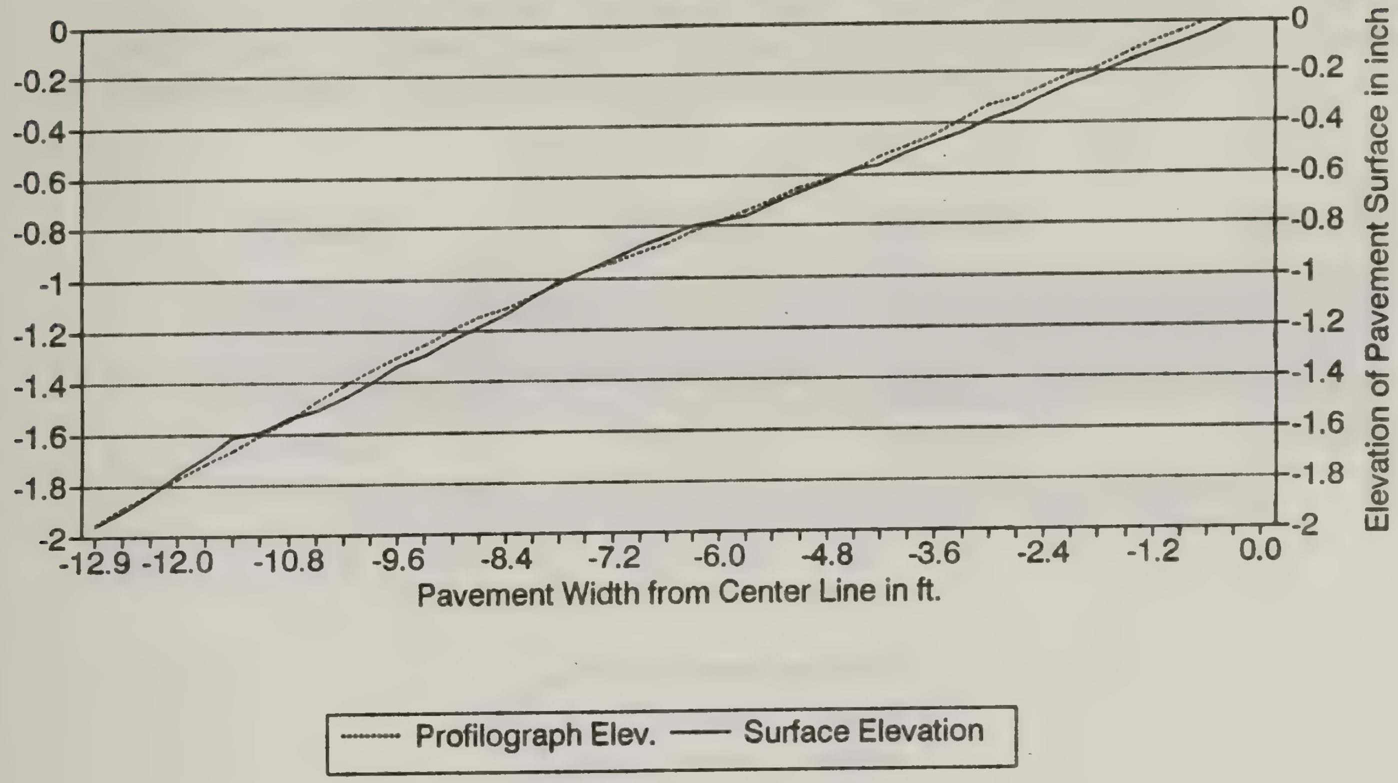


Post-construction & 1st Annual Profiles
MSU St. 23, 2144+00, Kraton, WBP Lane

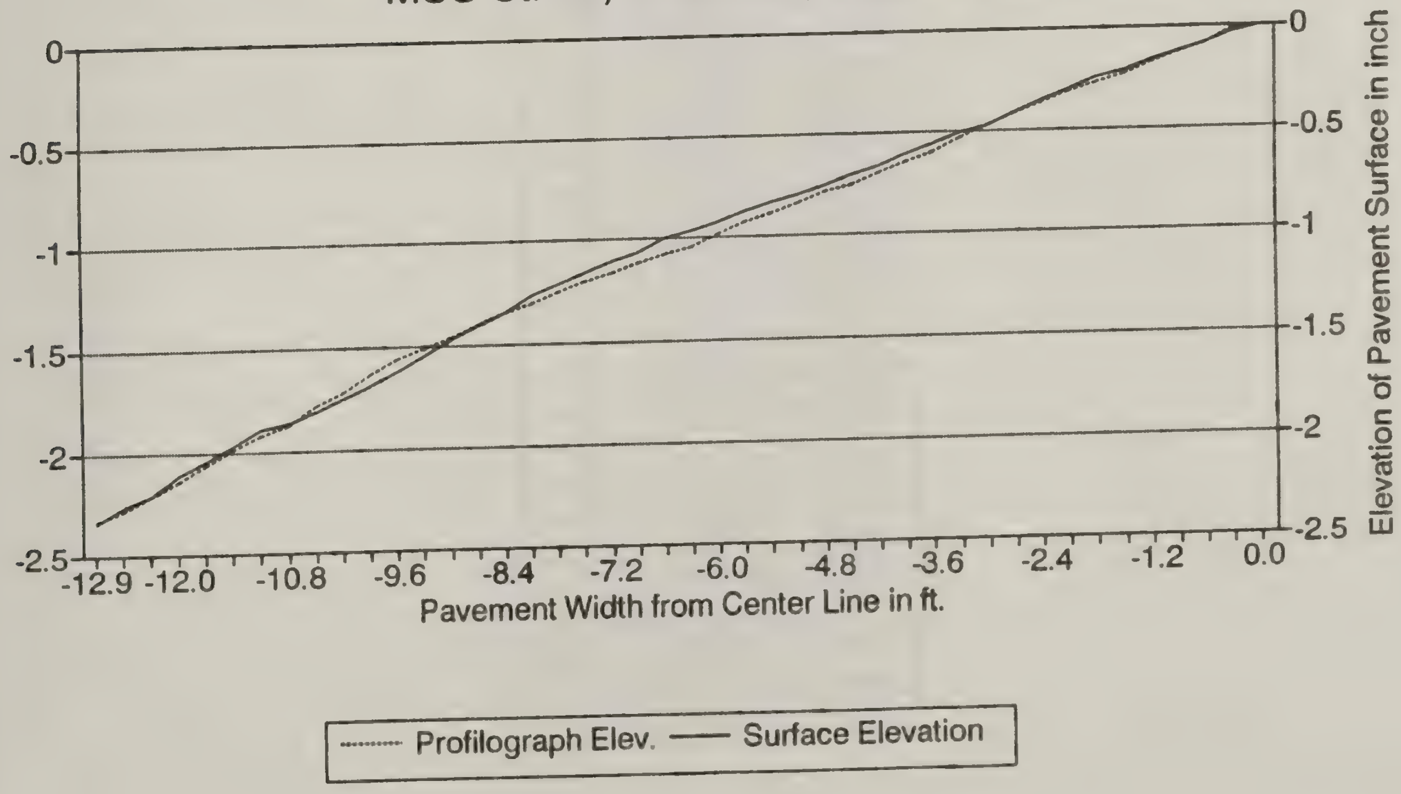


Post-construction & 1st Annual Profiles
MSU St. 24, 2138+00, Kraton, WBP Lane

Post-construction & 1st Annual Profiles
MSU St. 25, 2134+00, Kraton, WBP Lane

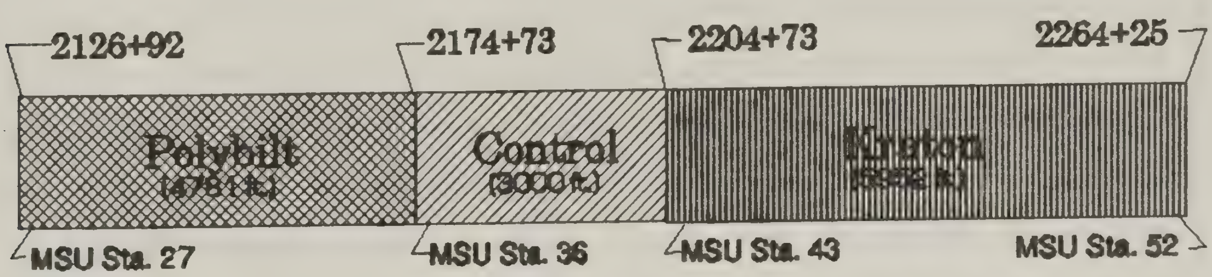


Post-construction & 1st Annual Profiles
MSU St. 26, 2130+00, Kraton, WBP Lane



Appendix F

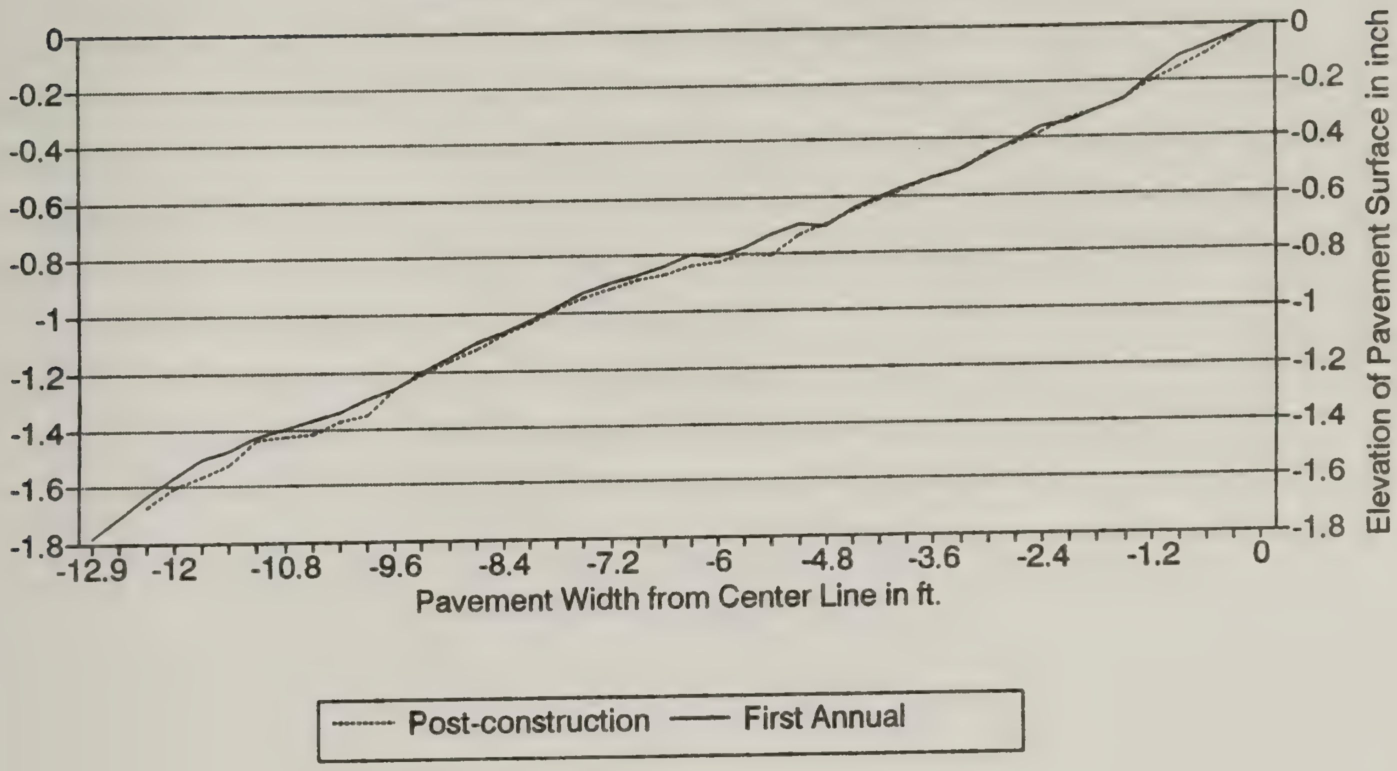
-Plots of the First Annual and Post-construction Pavement Profiles of East Bound Driving Lane by MSU Station Number, Highway Station Number and Modifier Used



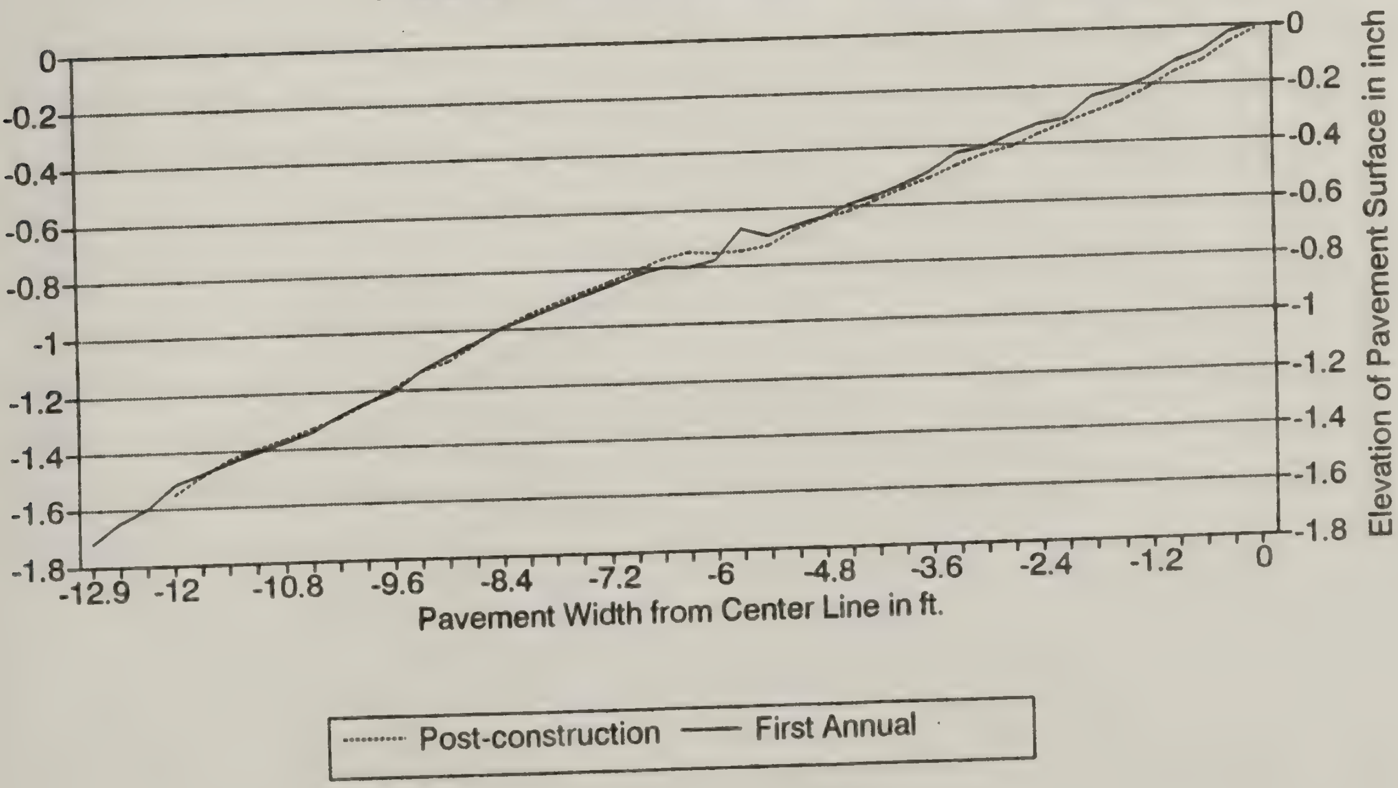
East Bound Field Experimental Test Section

MSU Station Number	Highway Stations	Section by Binder Used
27	2130+00	Polybilt
28	2134+00	Polybilt
29	2138+00	Polybilt
30	2144+00	Polybilt
31	2150+00	Polybilt
32	2154+00	Polybilt
33	2160+00	Polybilt
34	2164+00	Polybilt
35	2170+00	Polybilt
36	2176+00	Exxon
37	2180+00	Exxon
38	2184+00	Exxon
39	2188+00	Exxon
40	2192+00	Exxon
41	2196+00	Exxon
42	2200+00	Exxon
43	2208+00	Kraton
44	2214+00	Kraton
45	2220+00	Kraton
46	2226+00	Kraton
47	2232+00	Kraton
48	2238+00	Kraton
49	2244+00	Kraton
50	2250+00	Kraton
51	2254+00	Kraton
52	2260+00	Kraton

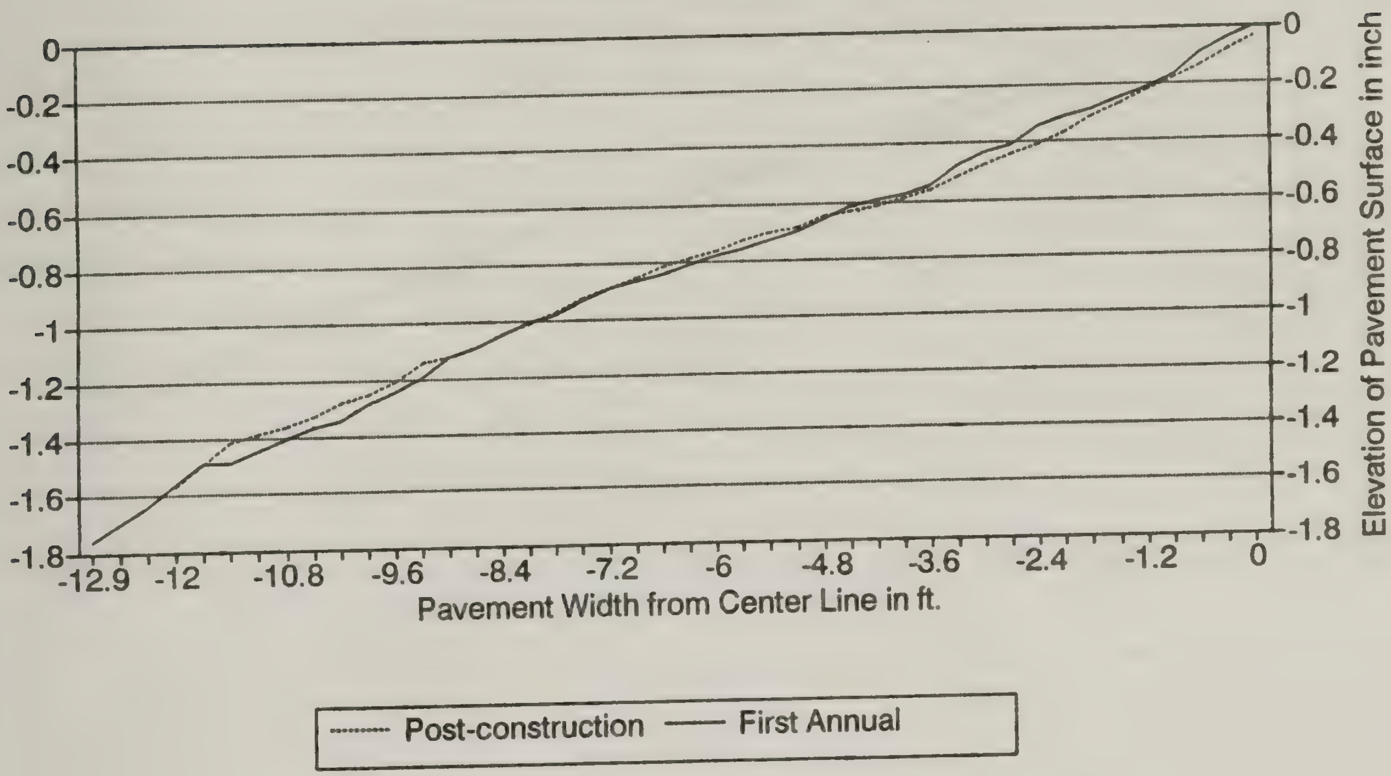
Post-construction & 1st Annual Profiles
MSU St. 27, 2130+00, Polybilt, EBP Lane



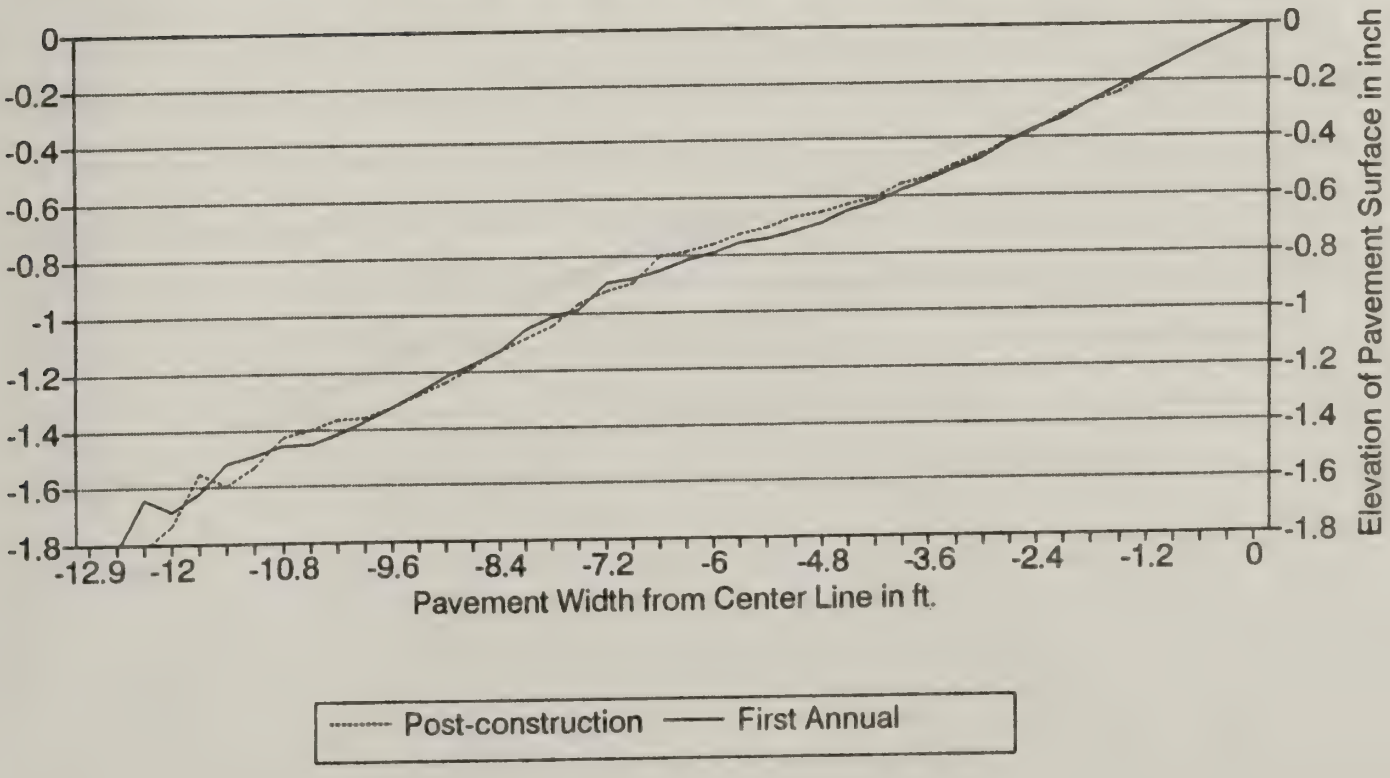
Post-construction & 1st Annual Profiles
MSU St. 28, 2134+00, Polybilt, EBP Lane

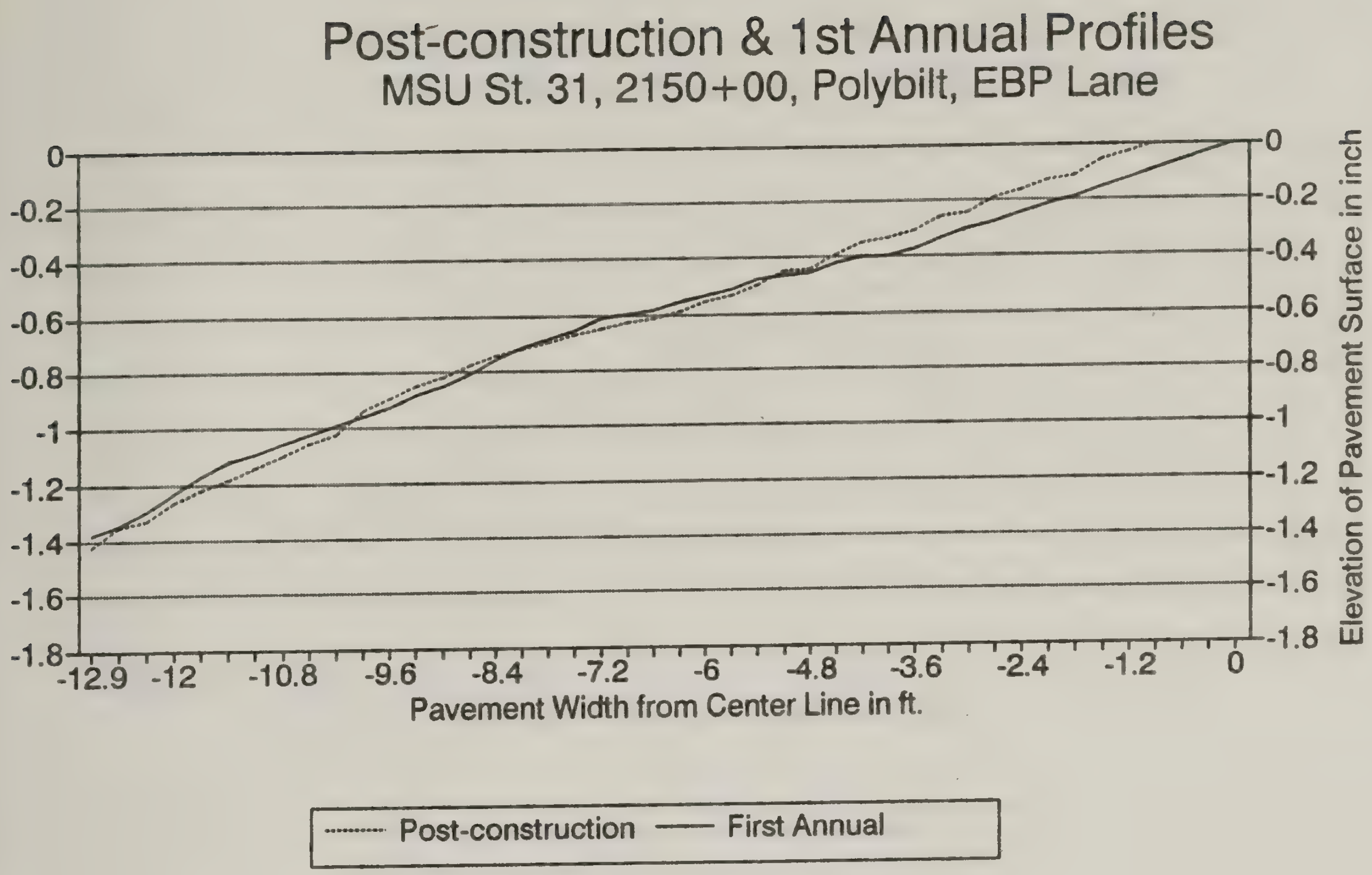


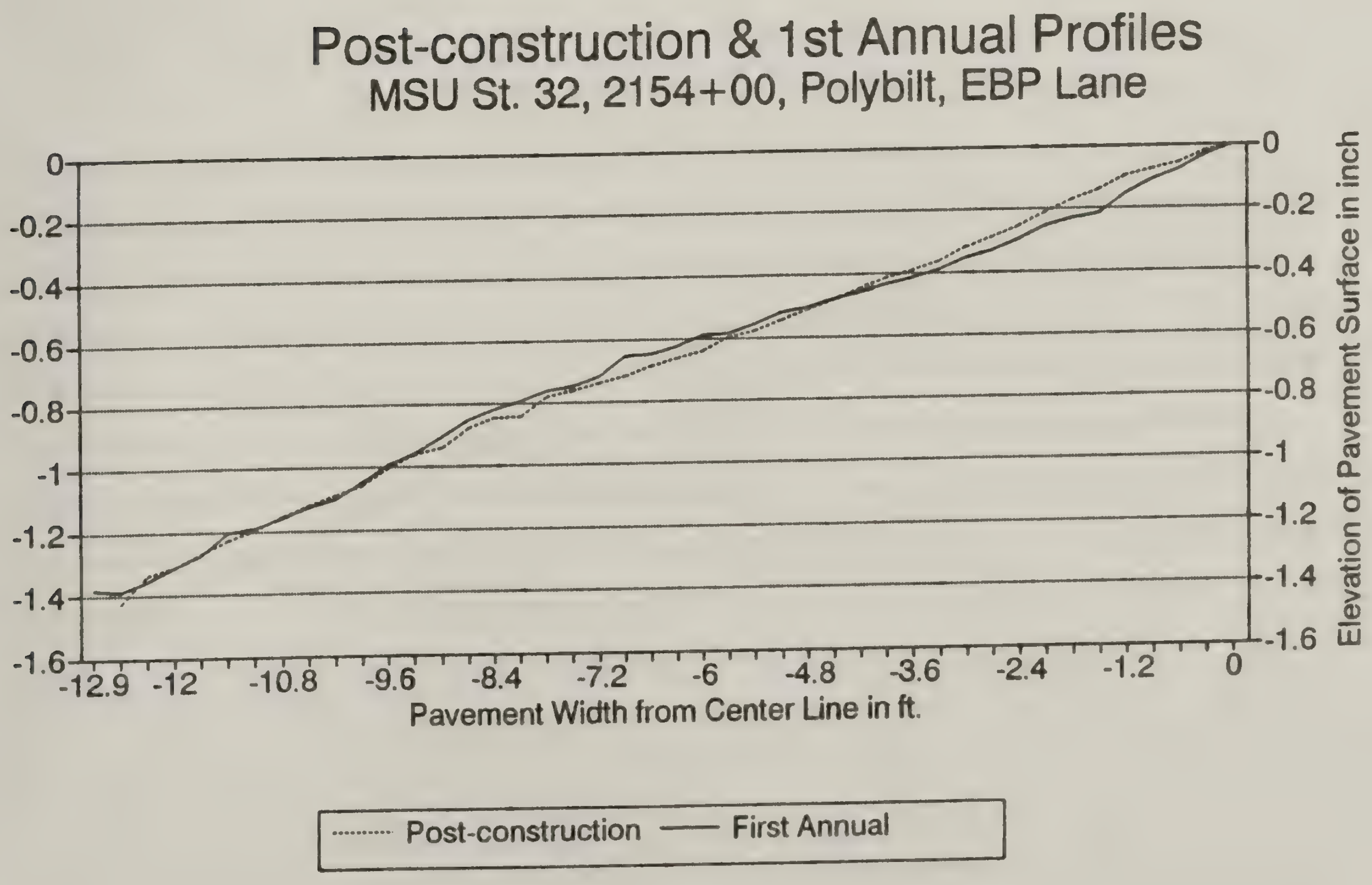
Post-construction & 1st Annual Profiles
MSU St. 29, 2138+00, Polybilt, EBP Lane



Post-construction & 1st Annual Profiles
MSU St. 30, 2144+00, Polybilt, EBP Lane




Post-construction & 1st Annual Profiles
MSU St. 31, 2150+00, Polybilt, EBP Lane
0
-0.2
-0.4
-0.6
-0.8
-1
-1.2
-1.4
-1.6
-1.8
-12.9
-12
-10.8
-9.6
-8.4
-7.2
-6
-4.8
-3.6
-2.4
-1.2
0
Pavement Width from Center Line in ft.
Elevation of Pavement Surface in inch
Post-construction
First Annual


Post-construction & 1st Annual Profiles
MSU St. 32, 2154+00, Polybilt, EBP Lane
0
-0.2
-0.4
-0.6
-0.8
-1
-1.2
-1.4
-1.6
-12.9
-12
-10.8
-9.6
-8.4
-7.2
-6
-4.8
-3.6
-2.4
-1.2
0
Pavement Width from Center Line in ft.
Elevation of Pavement Surface in inch
Post-construction
First Annual

[illegible]

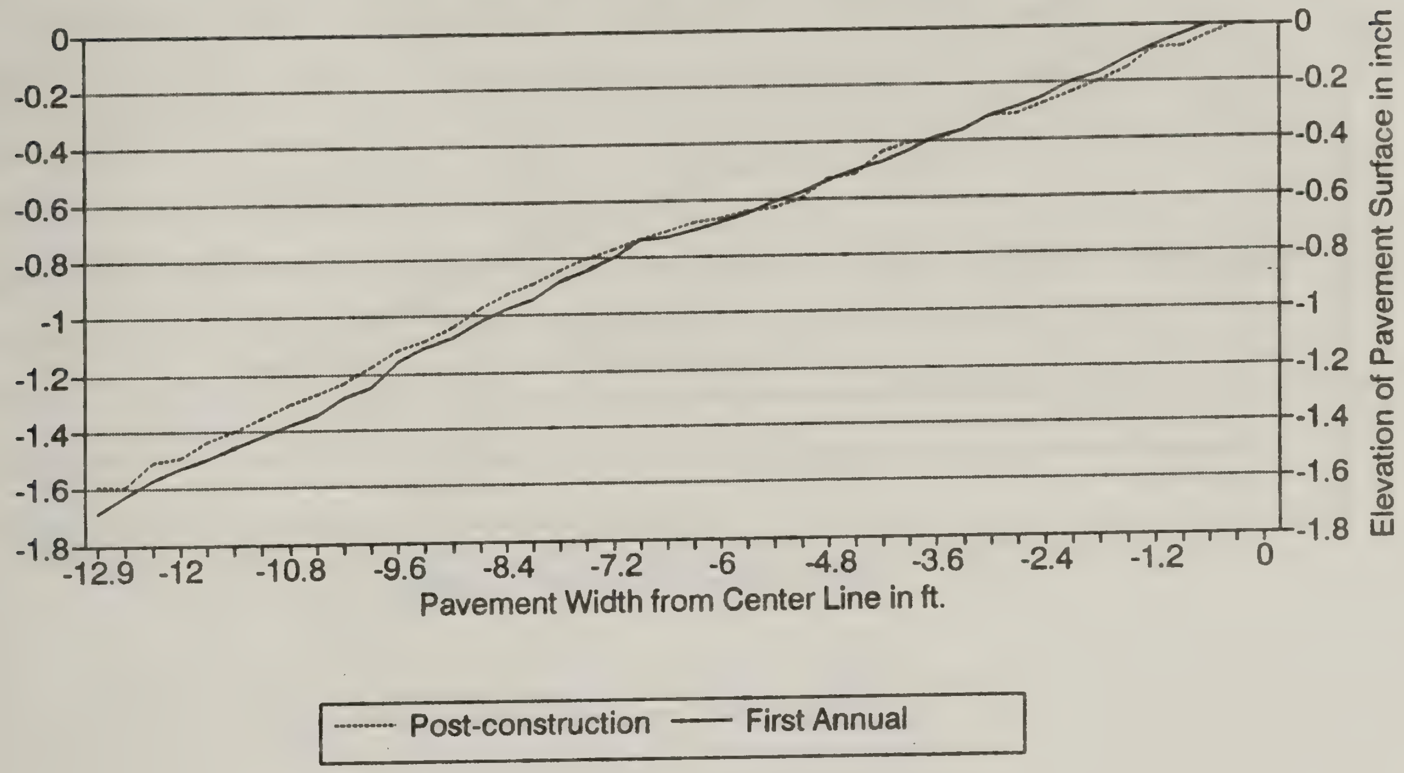
[illegible]

[illegible]

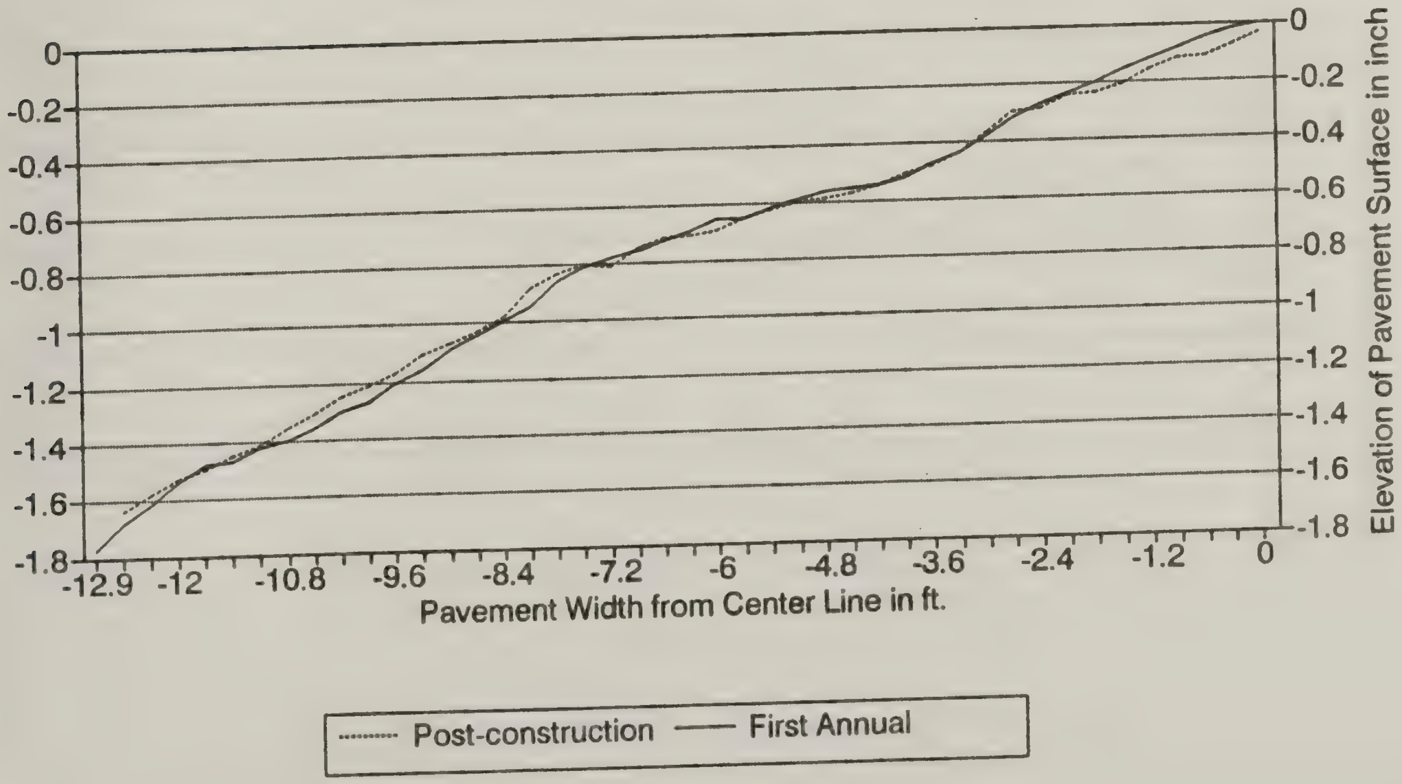
[illegible]

[illegible]

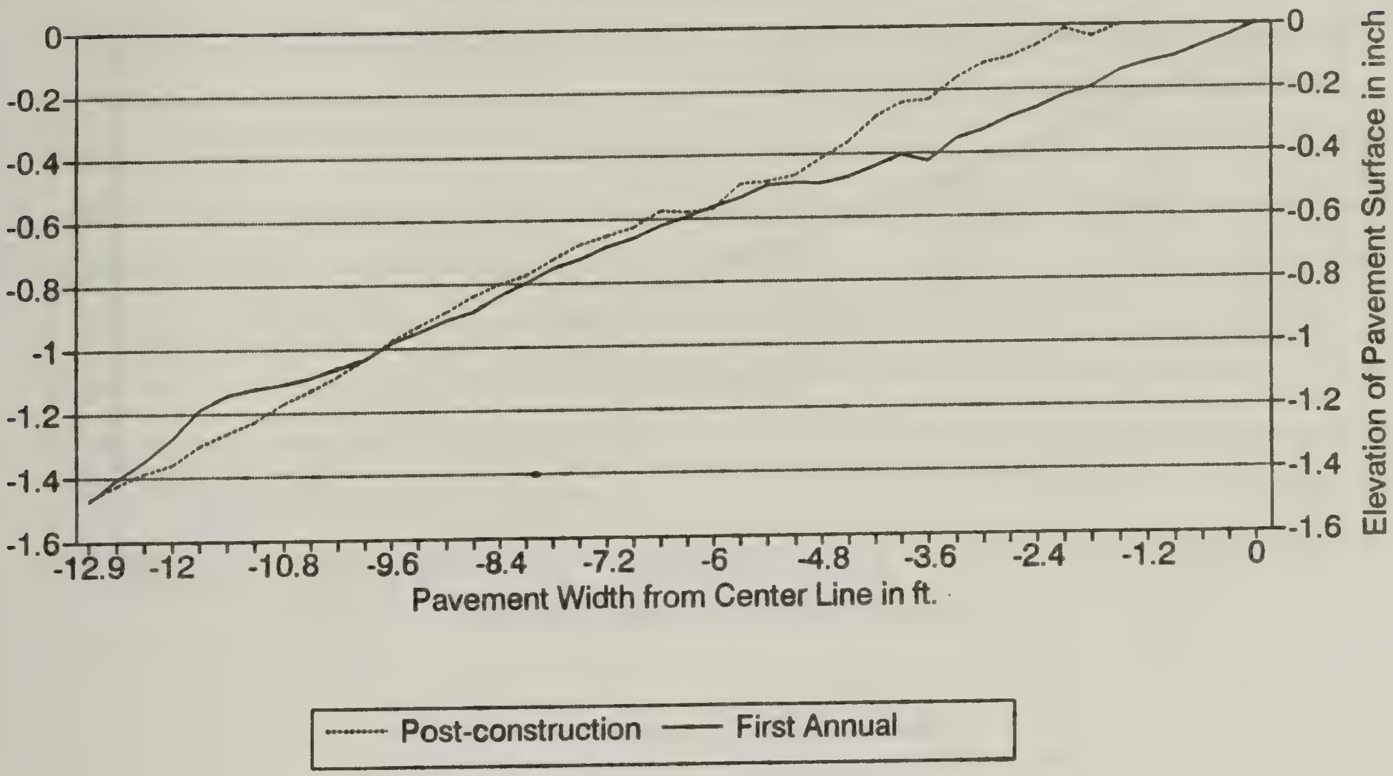
Post-construction & 1st Annual Profiles
MSU St. 33, 2160+00, Polybilt, EBP Lane



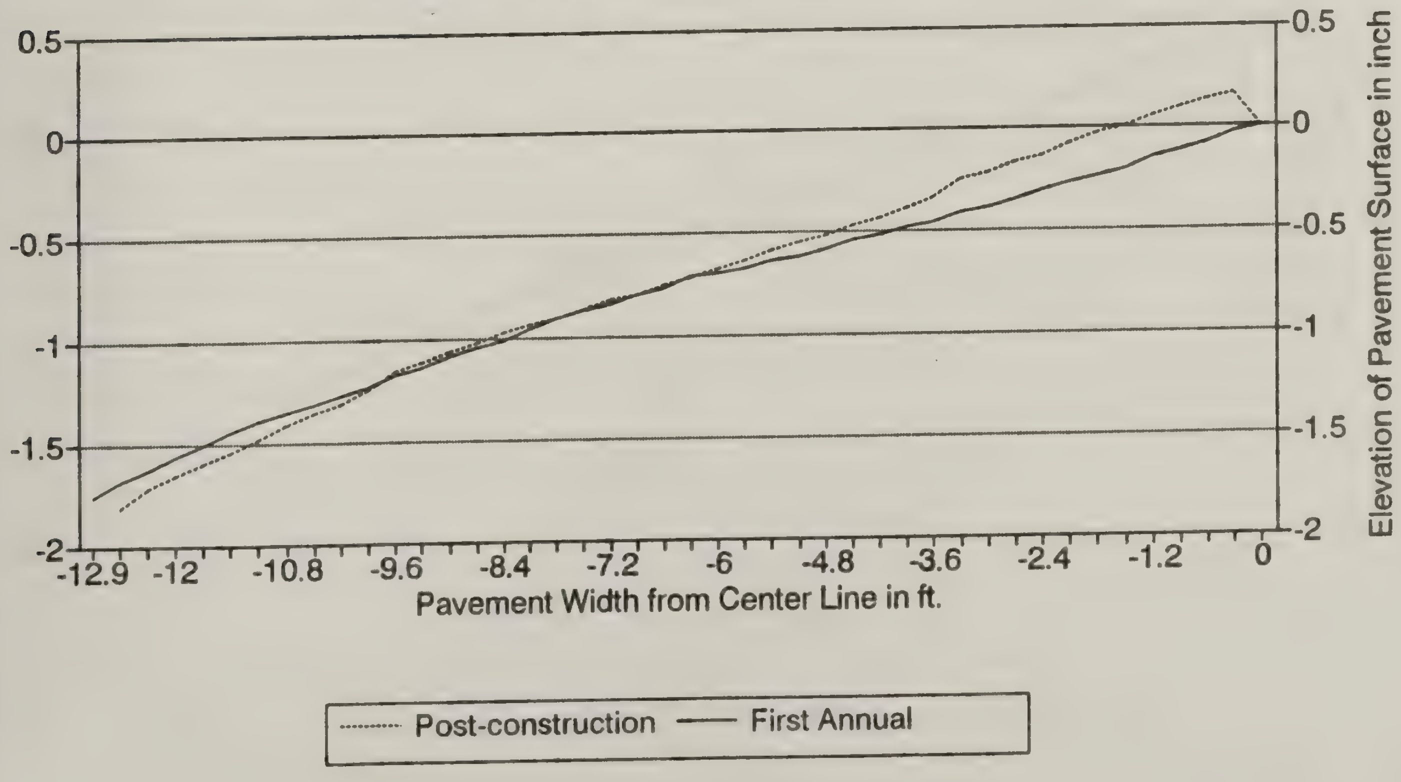
Post-construction & 1st Annual Profiles
MSU St. 34, 2164+00, Polybilt, EBP Lane



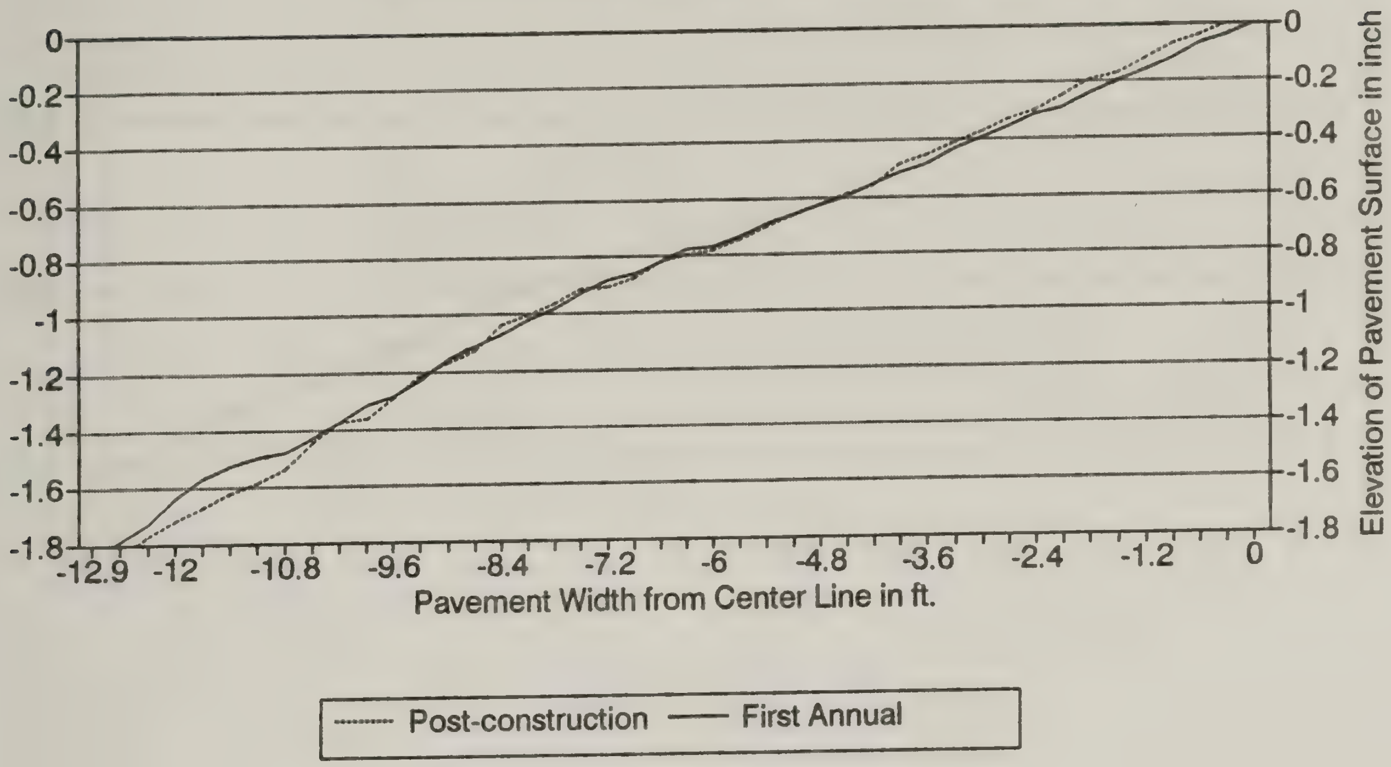
Post-construction & 1st Annual Profiles
MSU St. 35, 2170+00, Polybilt, EBP Lane



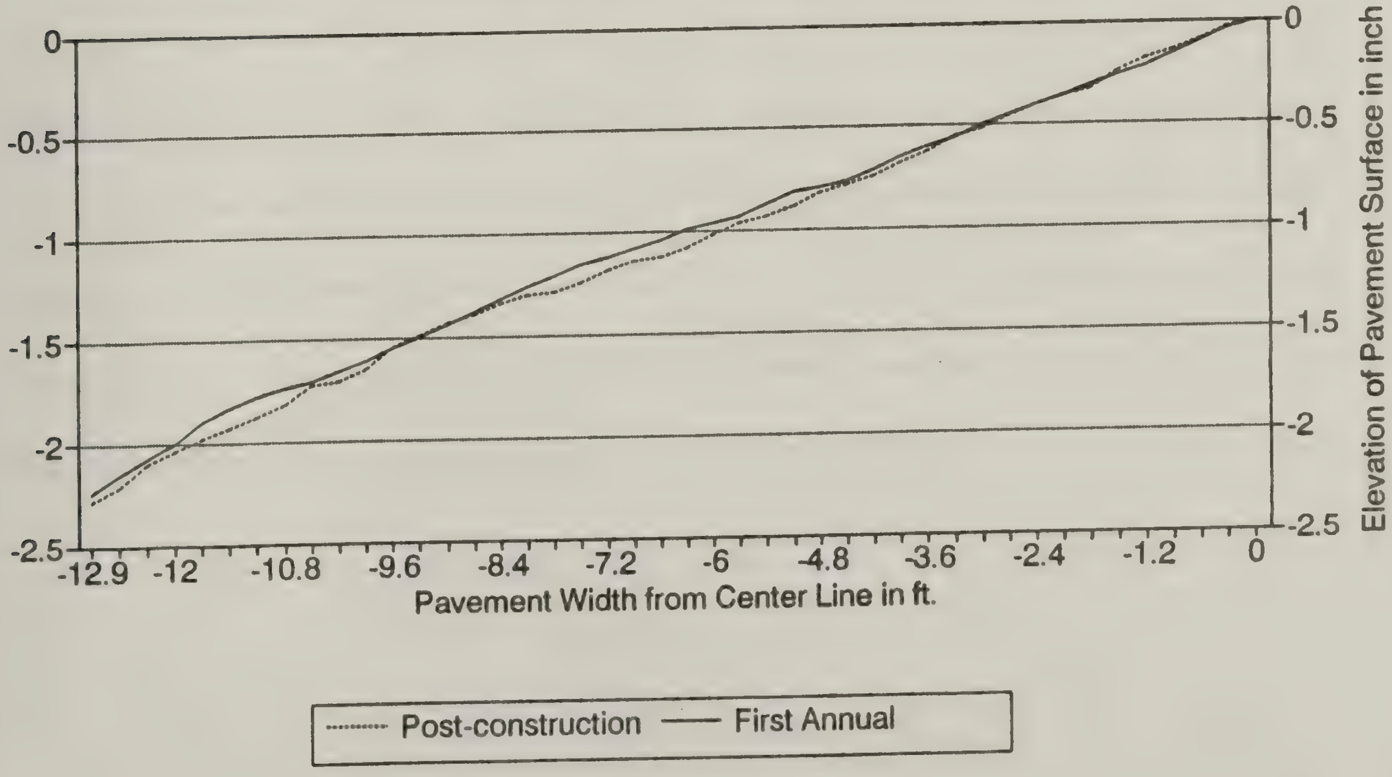
Post-construction & 1st Annual Profiles
MSU St. 36, 2176+00, Control, EBP Lane

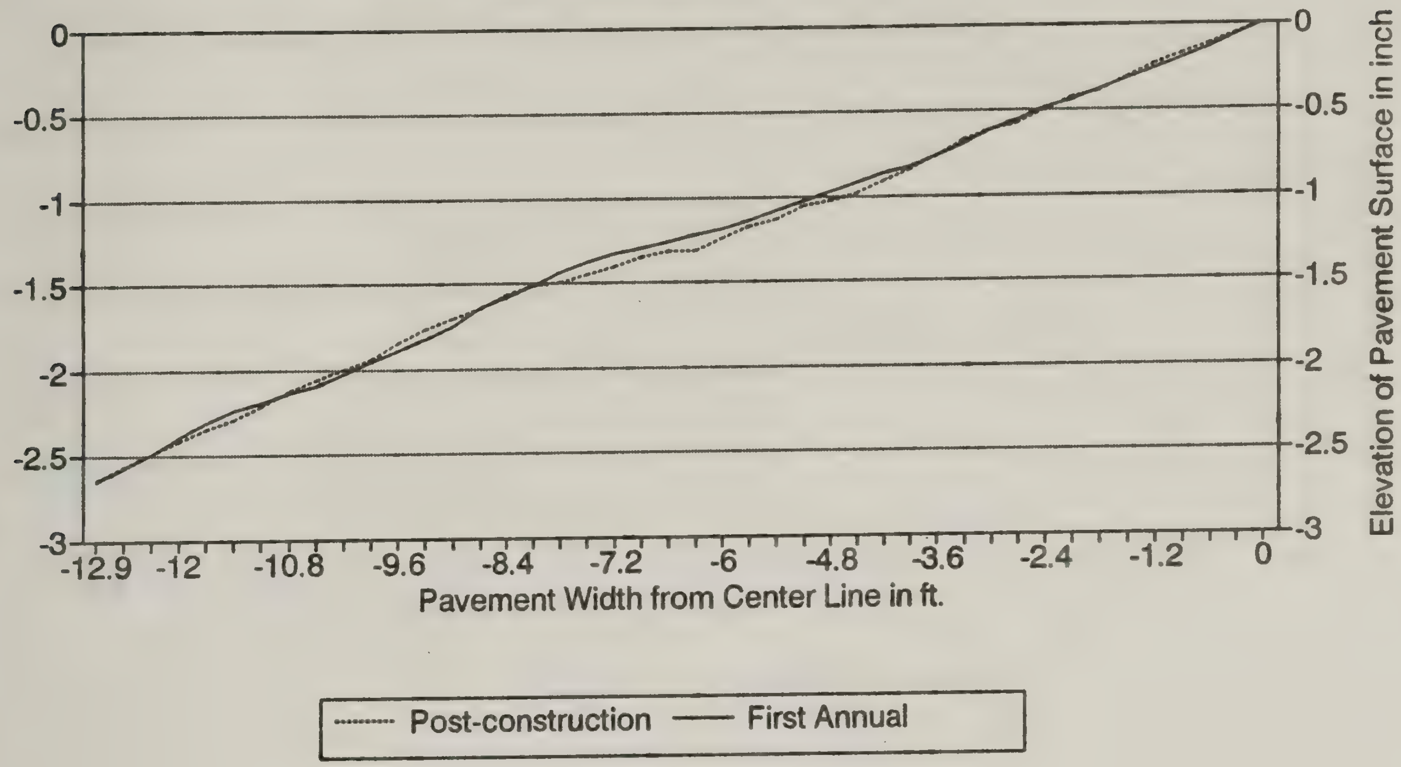


Post-construction & 1st Annual Profiles
MSU St. 37, 2180+00, Control, EBP Lane

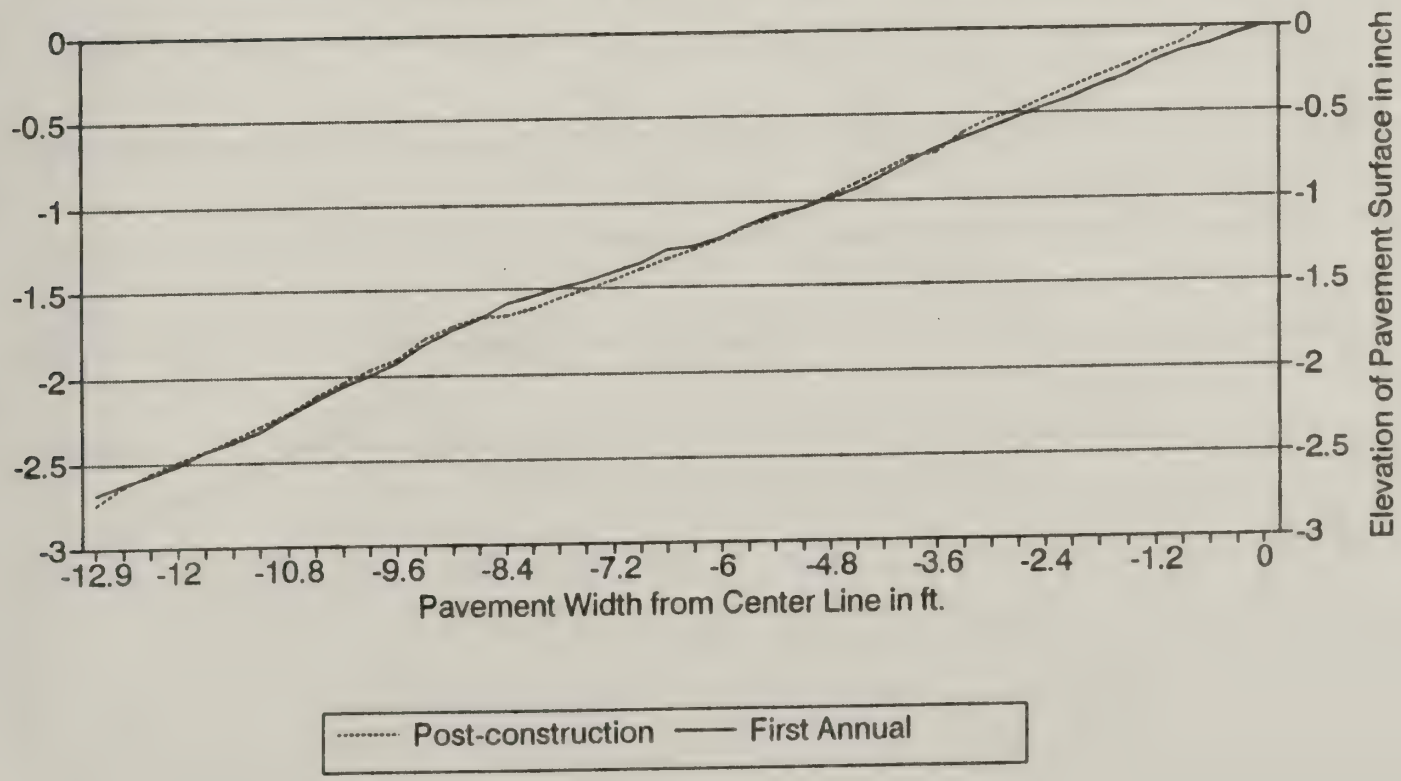


Post-construction & 1st Annual Profiles
MSU St. 38, 2184+00, Control, EBP Lane





Post-construction & 1st Annual Profiles
MSU St. 39, 2188+00, Control, EBP Lane



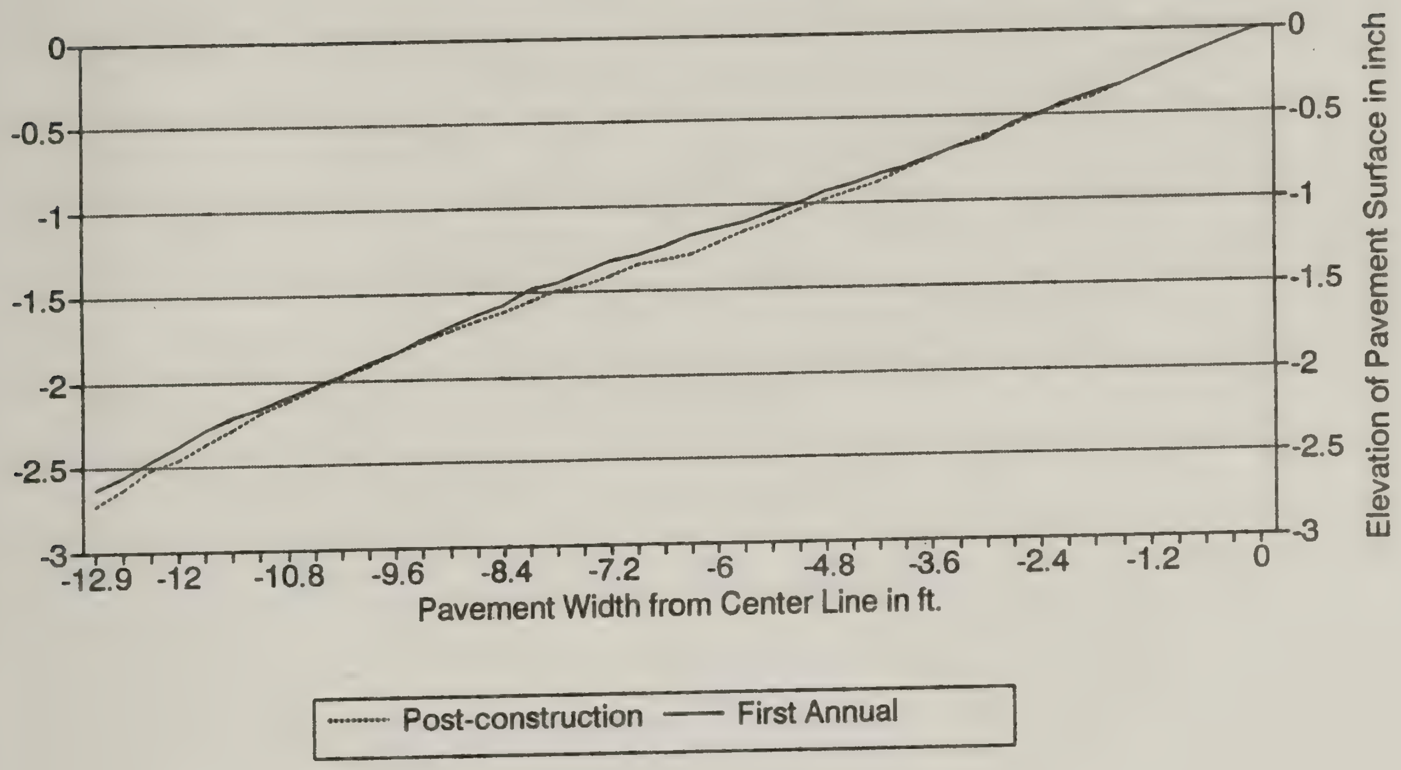
Post-construction & 1st Annual Profiles
MSU St. 40, 2192+00, Control, EBP Lane

[illegible]

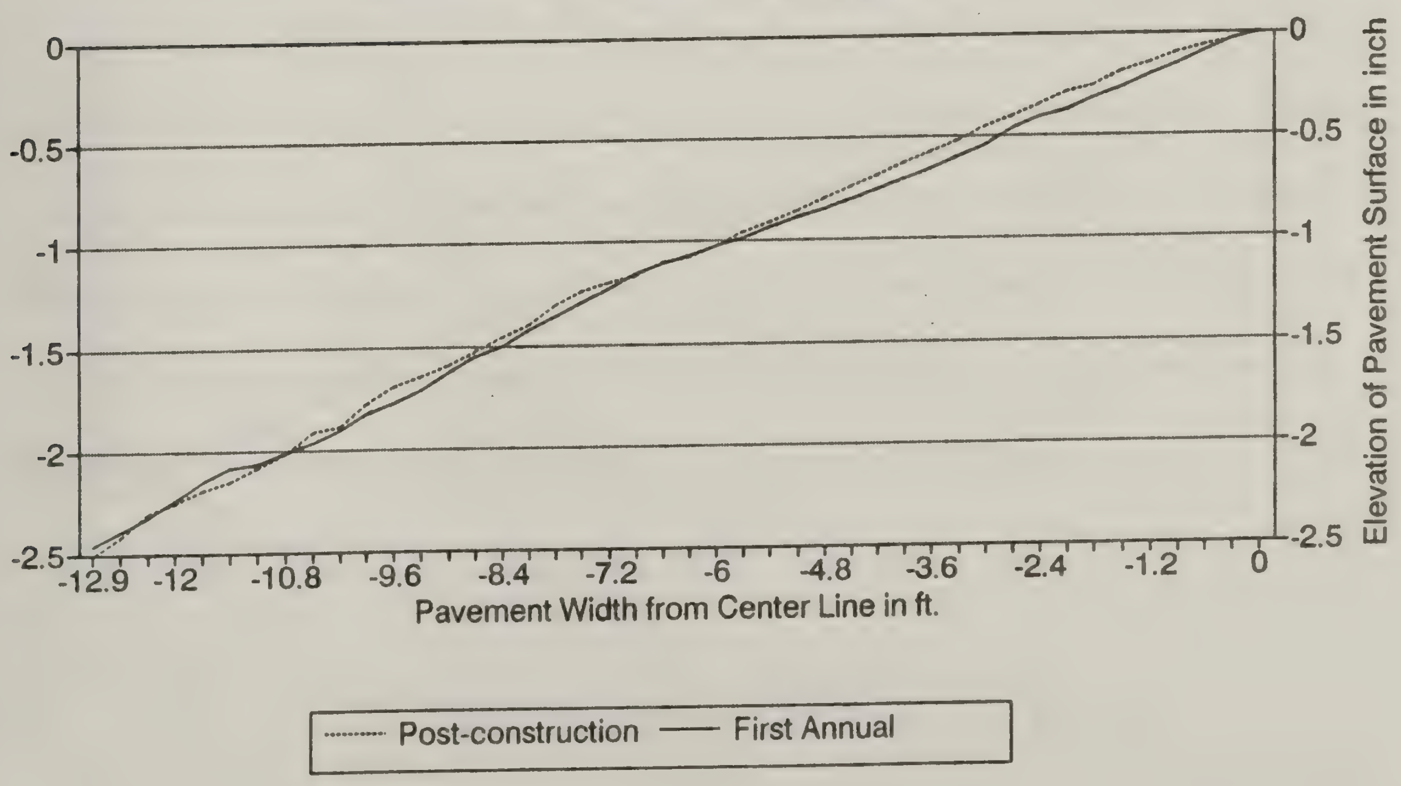
[illegible]

[illegible]

[illegible]

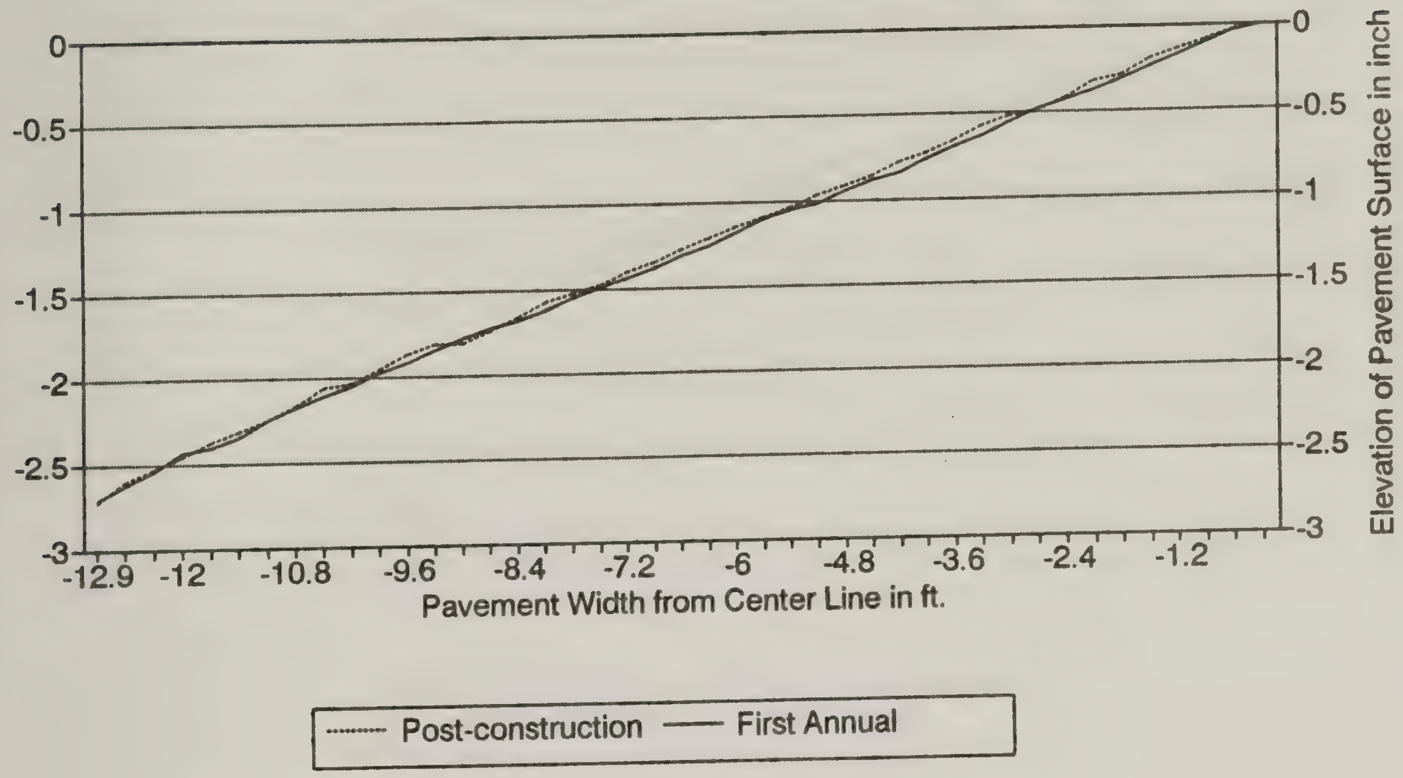


Post-construction & 1st Annual Profiles
MSU St. 41, 2196+00, Control, EBP Lane

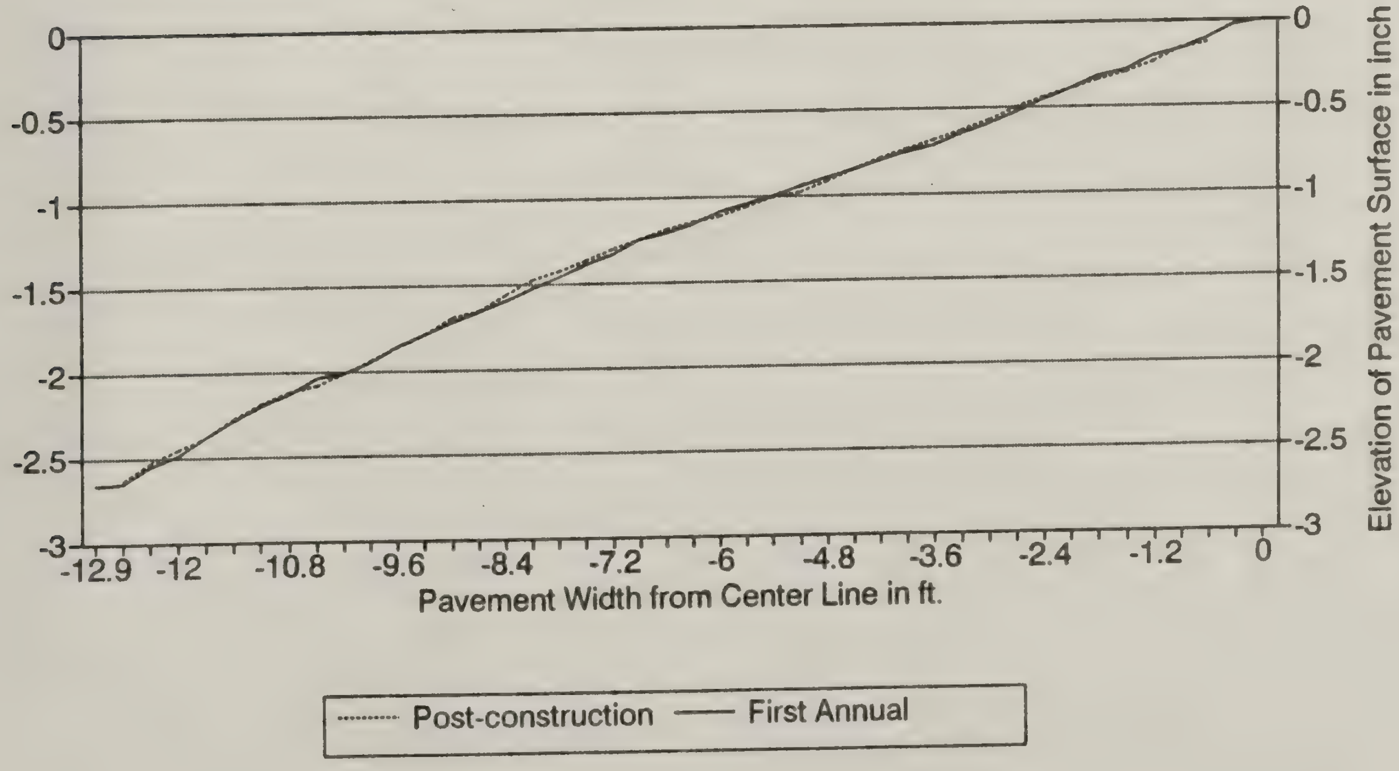


Post-construction & 1st Annual Profiles
MSU St. 42, 2200+00, Control, EBP Lane

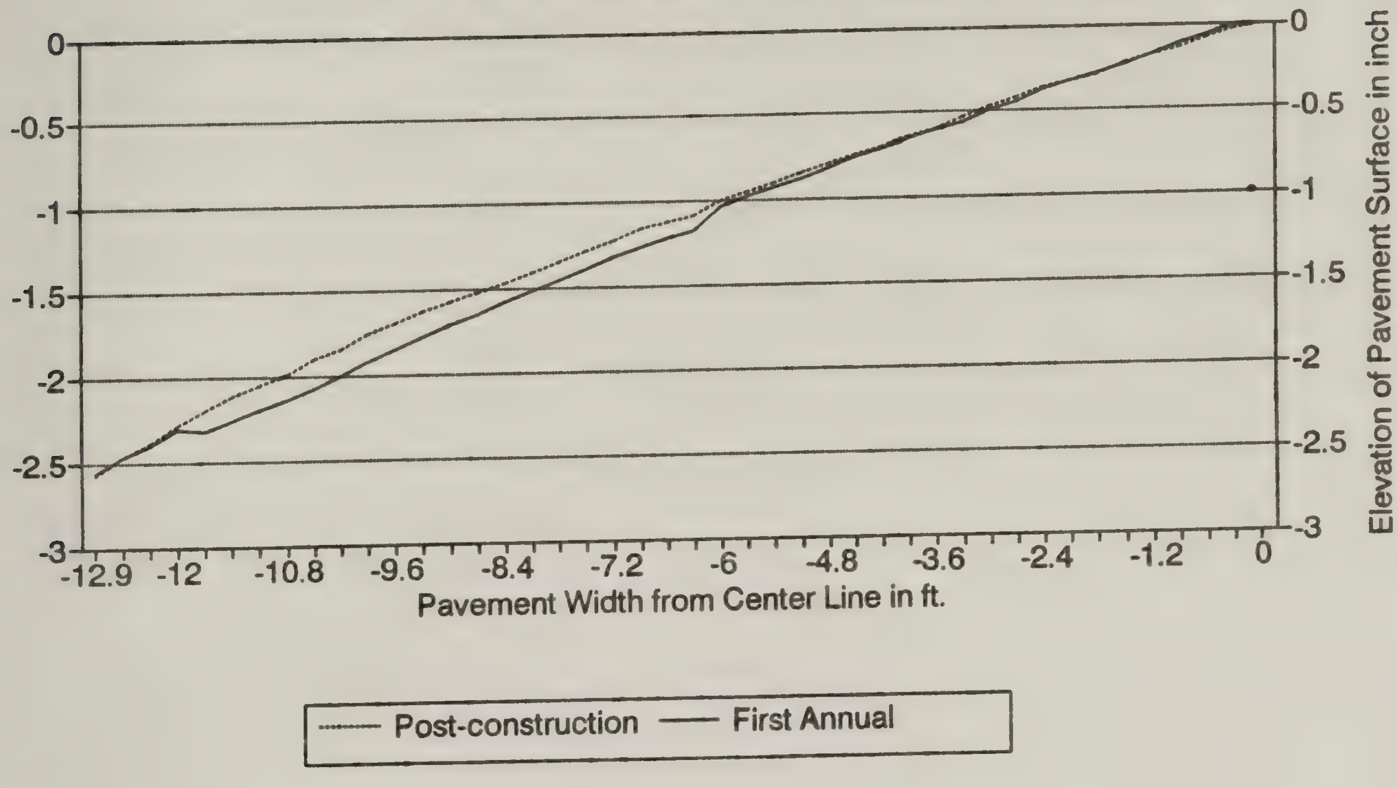
Post-construction & 1st Annual Profiles
MSU St. 43, 2208+00, Kraton, EBP Lane



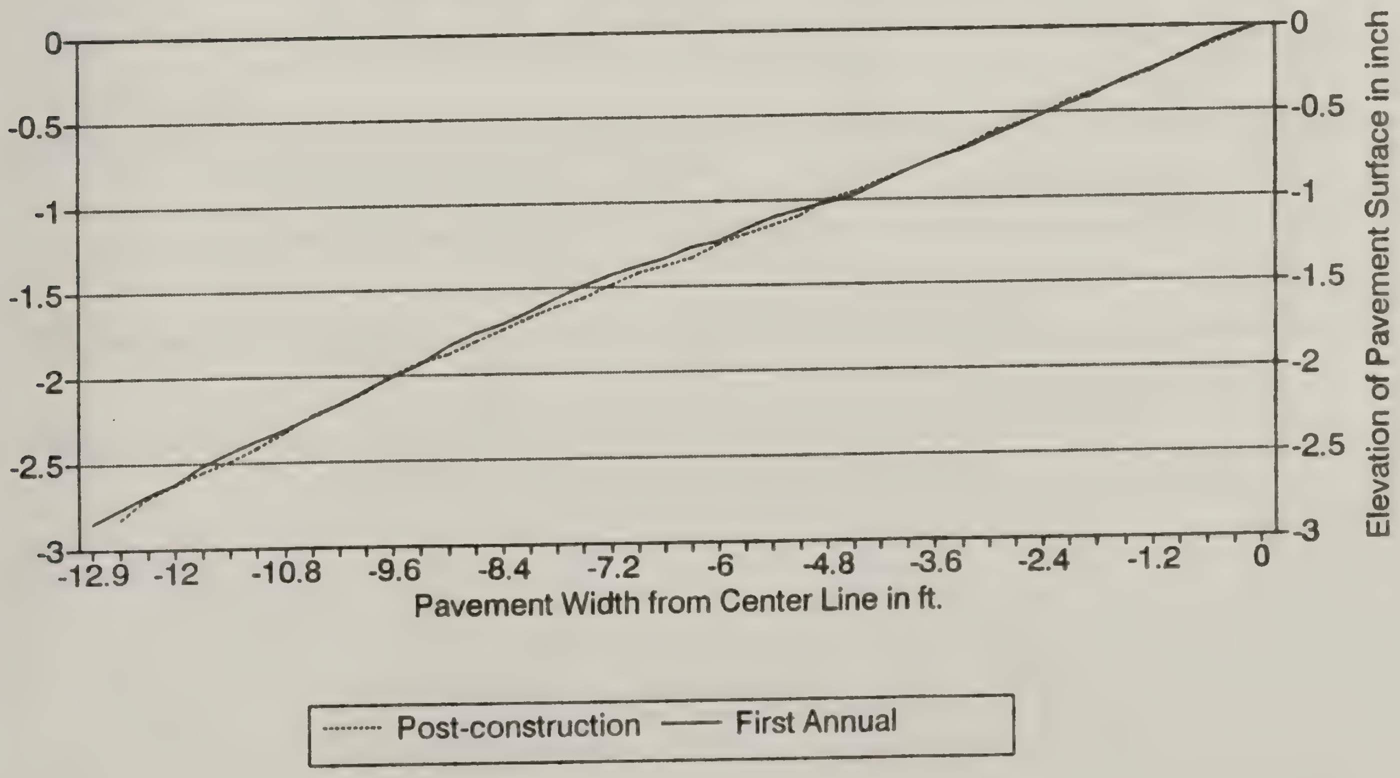
Post-construction & 1st Annual Profiles
MSU St. 44, 2214+00, Kraton, EBP Lane

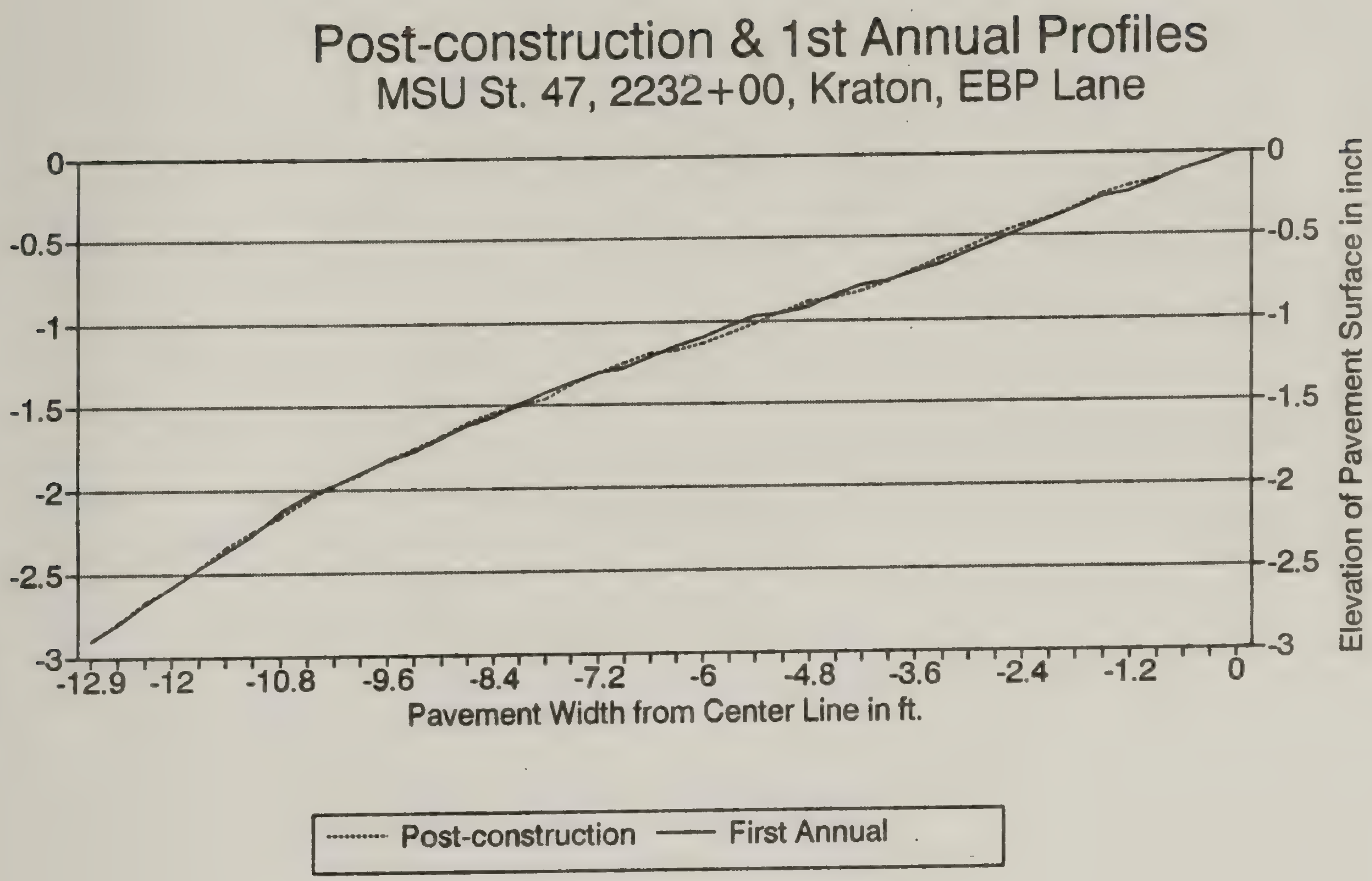


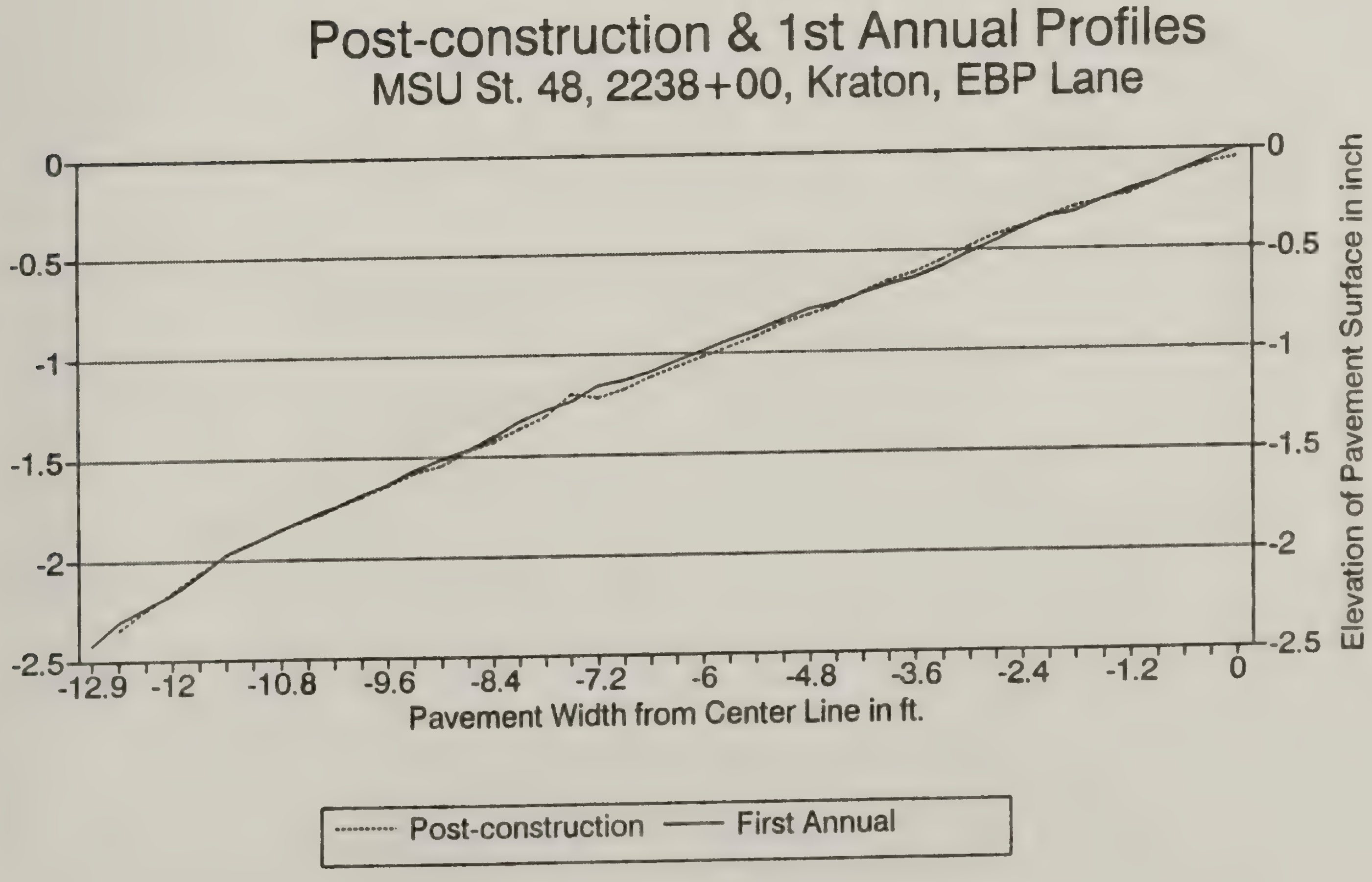
Post-construction & 1st Annual Profiles
MSU St. 45, 2220+00, Kraton, EBP Lane

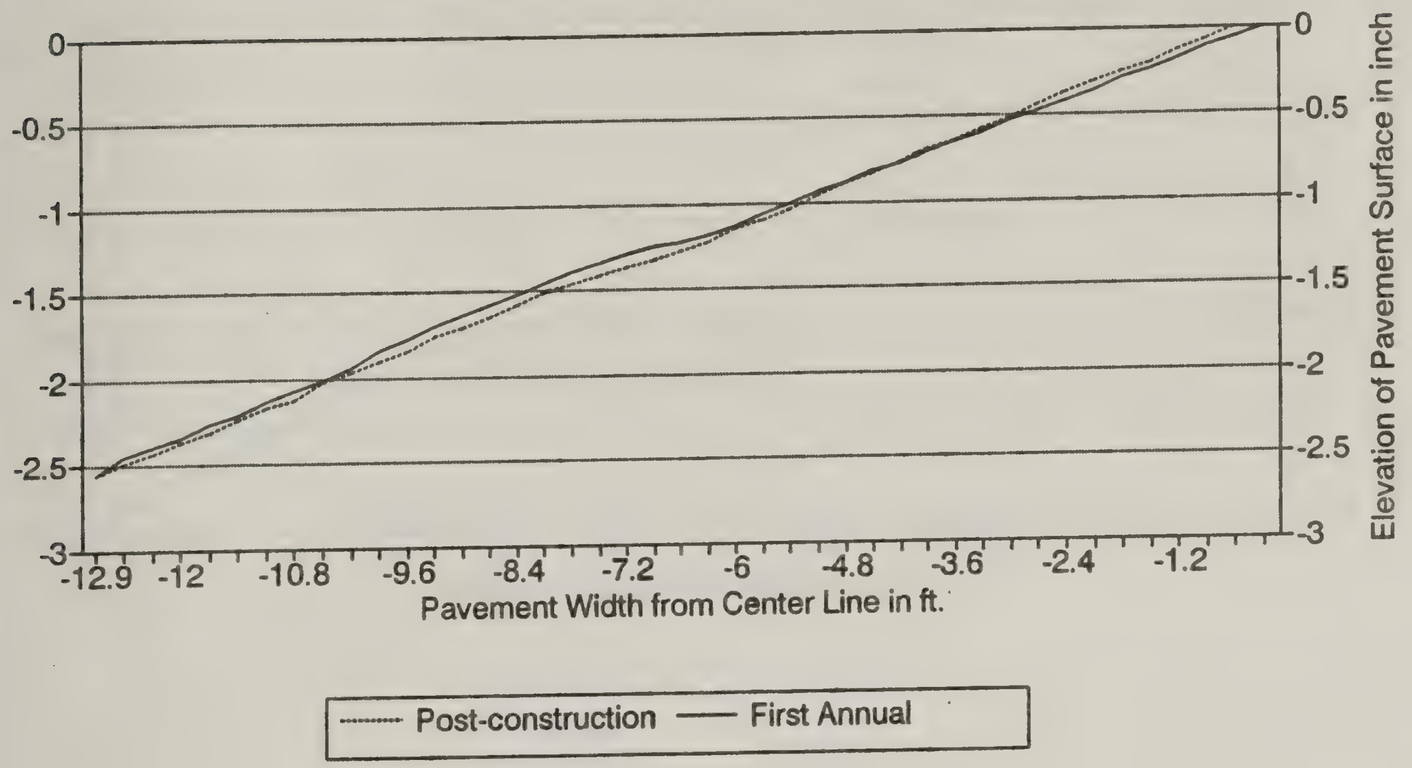


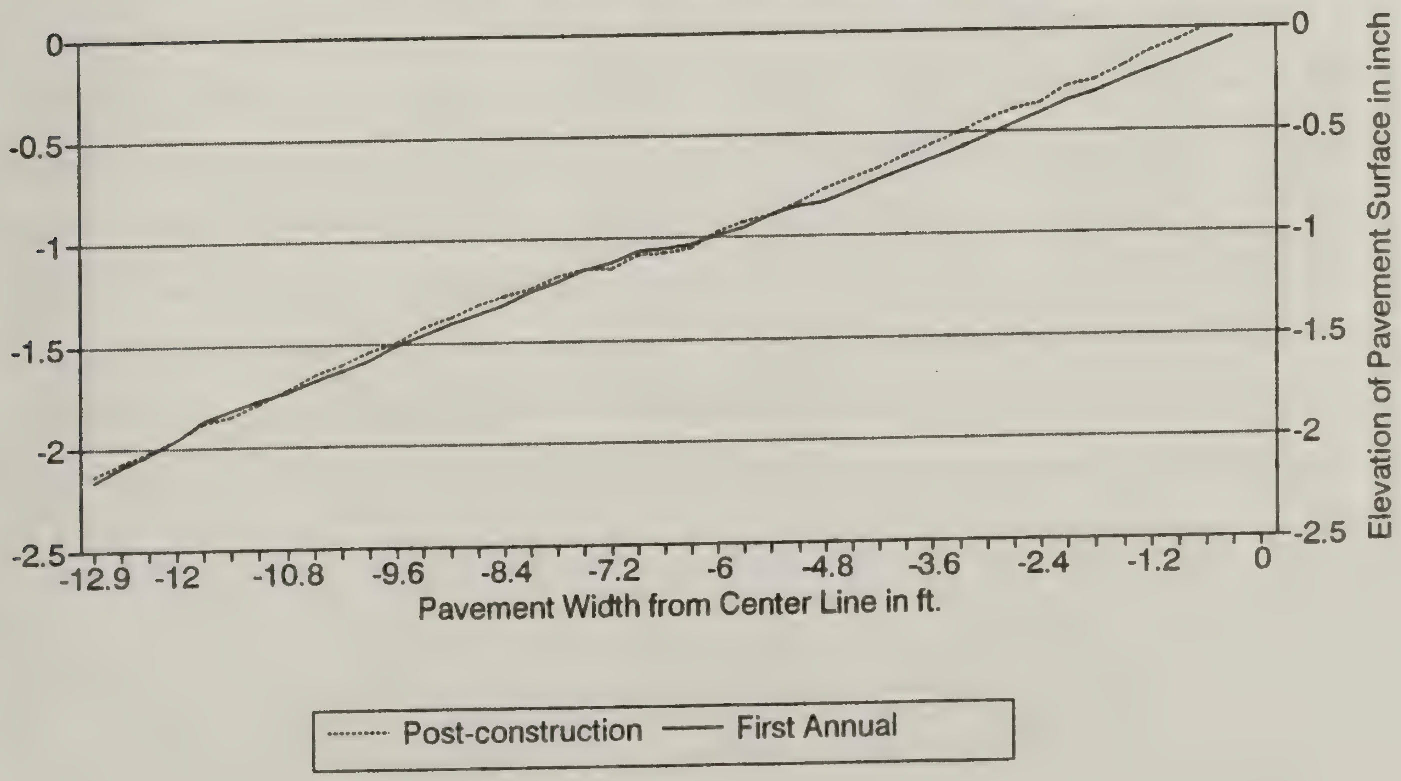
Post-construction & 1st Annual Profiles
MSU St. 46, 2226+00, Kraton, EBP Lane




Post-construction & 1st Annual Profiles
MSU St. 47, 2232+00, Kraton, EBP Lane


Post-construction & 1st Annual Profiles
MSU St. 48, 2238+00, Kraton, EBP Lane


Post-construction & 1st Annual Profiles
MSU St. 49, 2244+00, Kraton, EBP Lane


Post-construction & 1st Annual Profiles
MSU St. 50, 2250+00, Kraton, EBP Lane

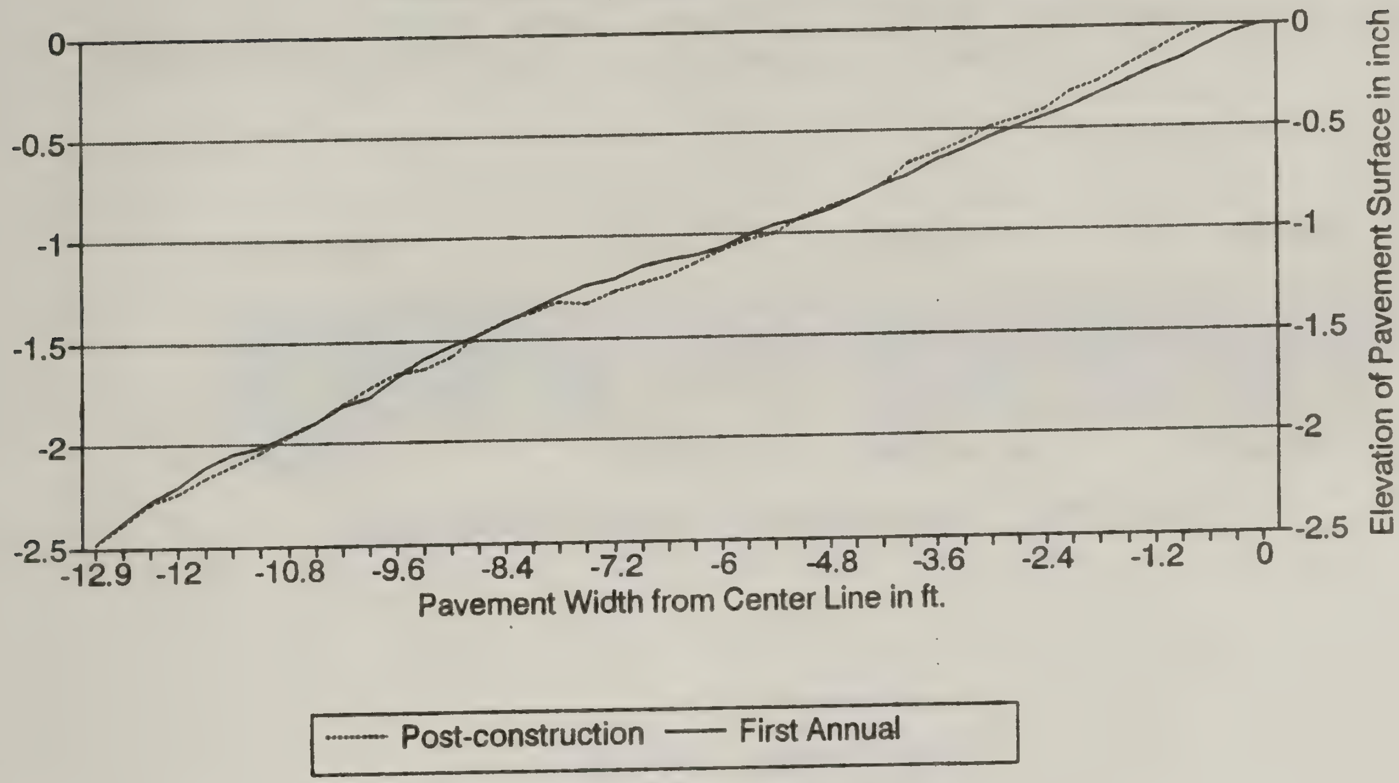
[illegible]

[illegible]

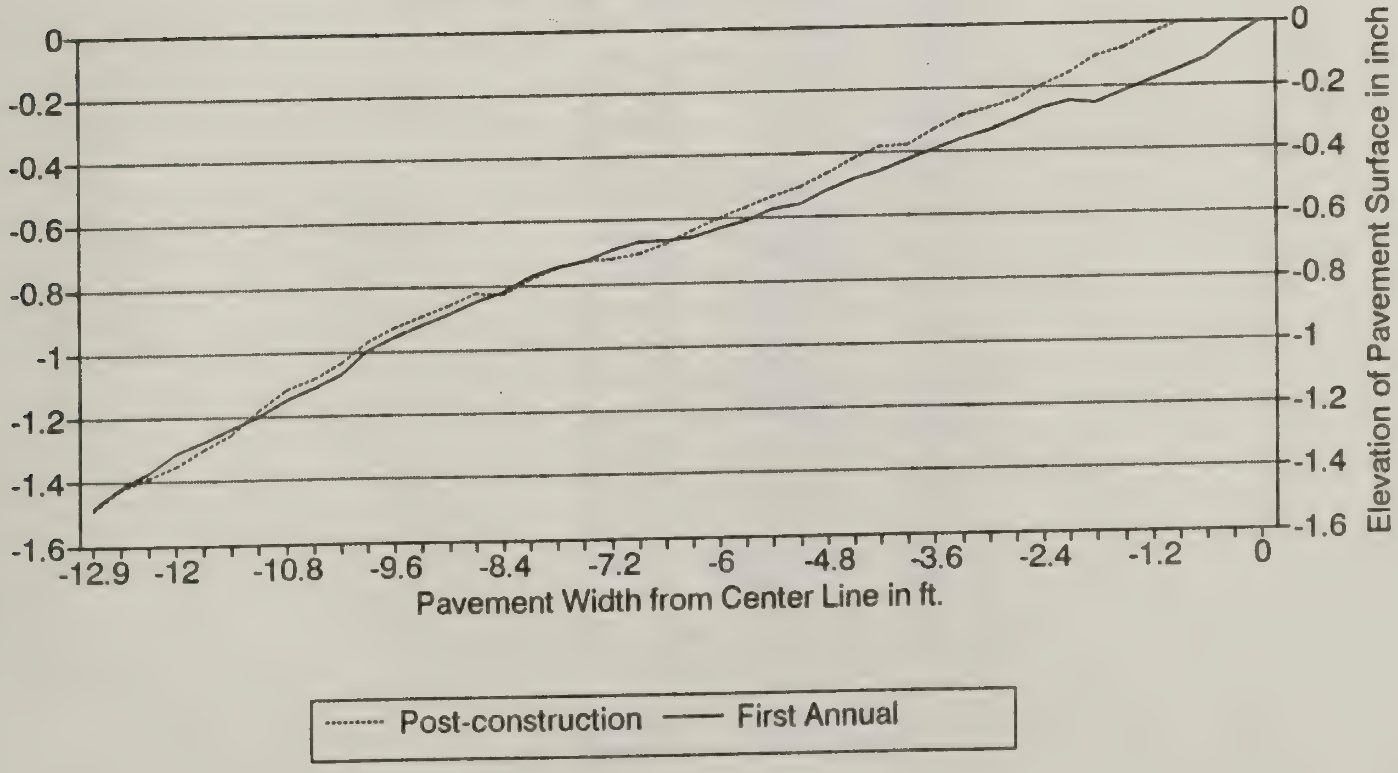
[illegible]

[illegible]

Post-construction & 1st Annual Profiles
MSU St. 51, 2254+00, Kraton, EBP Lane

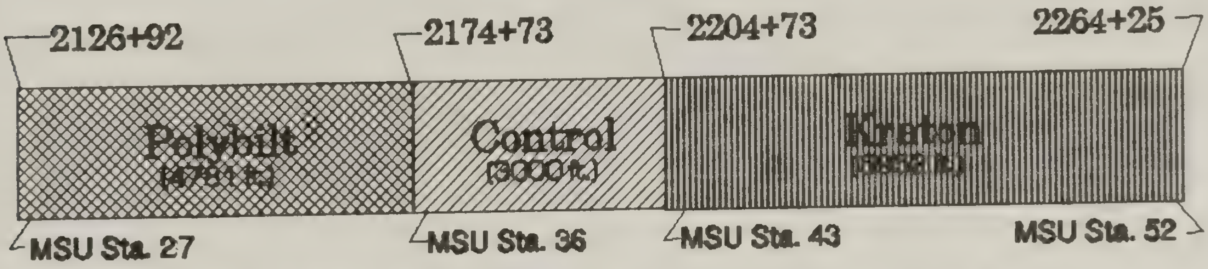


Post-construction & 1st Annual Profiles
MSU St. 52, 2260+00, Kraton, EBP Lane



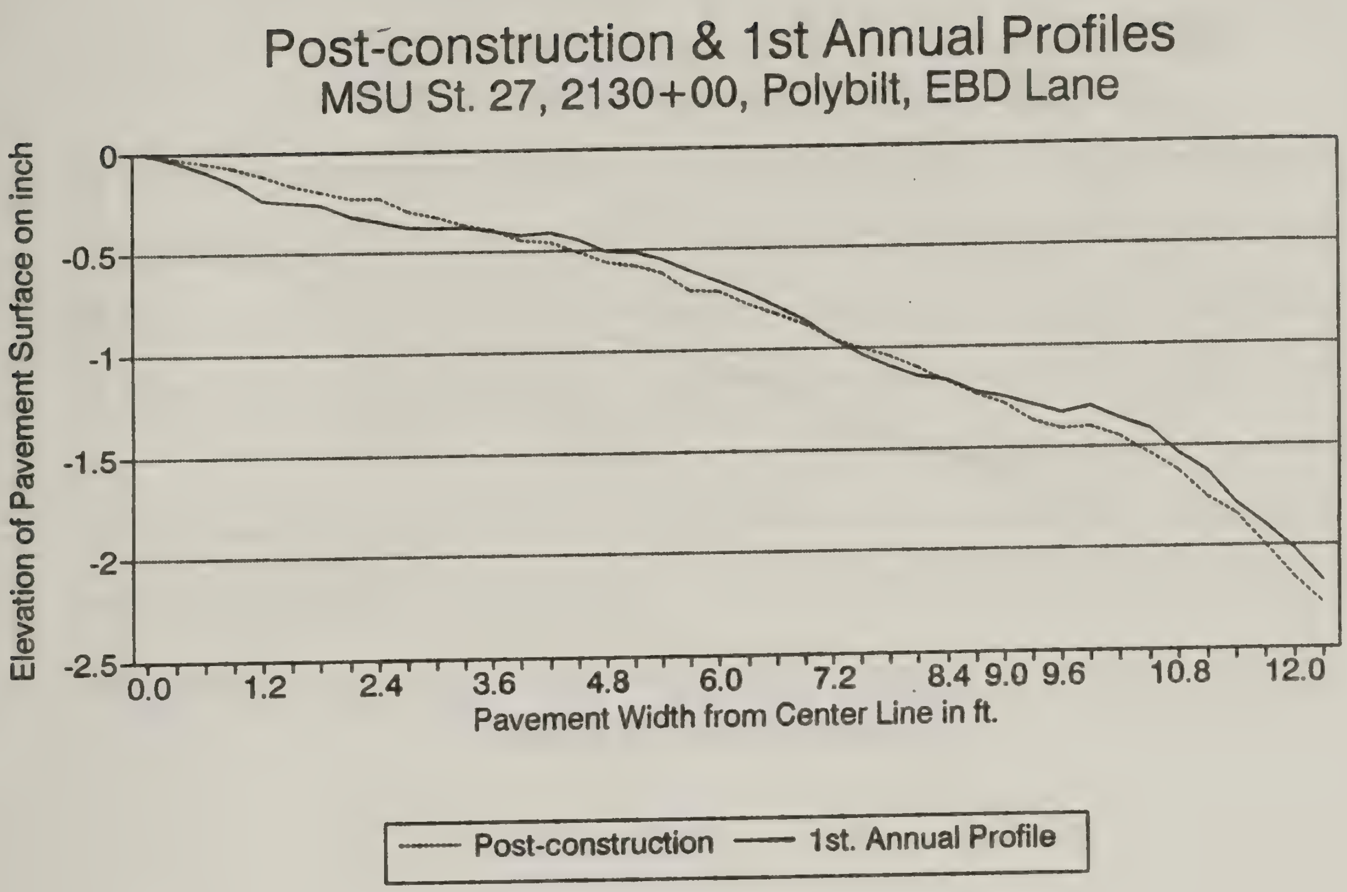
Appendix G

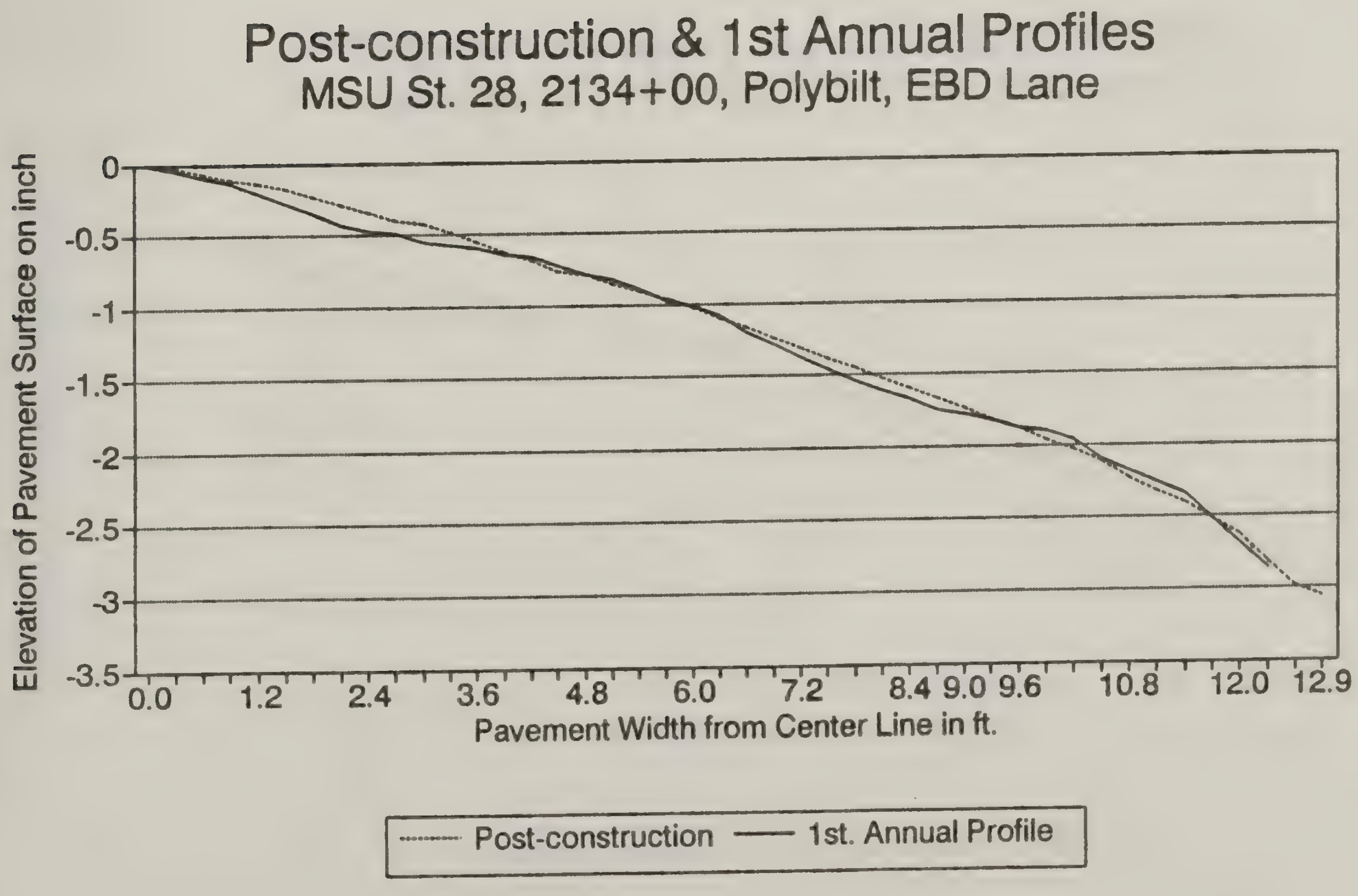
-Plots of the First Annual and Post-construction Pavement Profiles of East Bound Passing Lane by MSU Station Number, Highway Station Number and Modifier Used

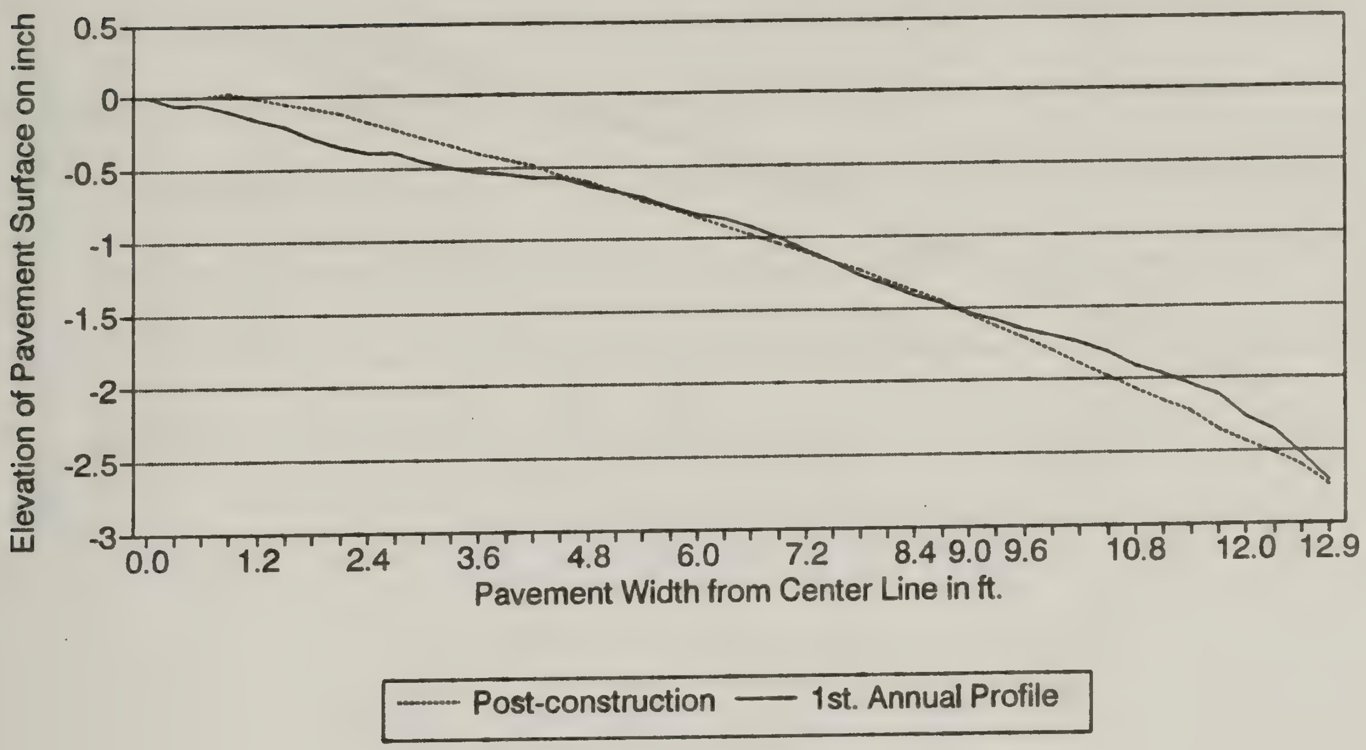


East Bound Field Experimental Test Section

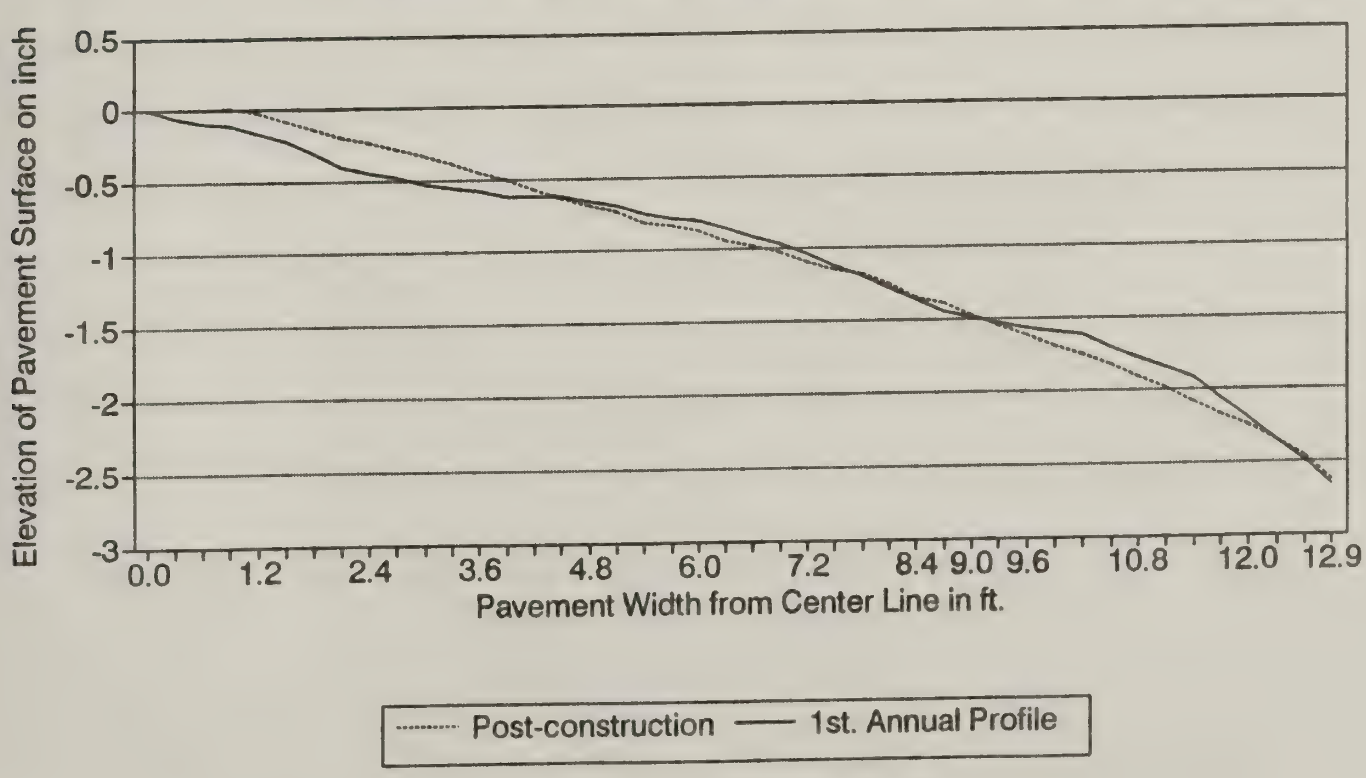
MSU Station Number	Highway Stations	Section by Binder Used
27	2130+00	Polybilt
28	2134+00	Polybilt
29	2138+00	Polybilt
30	2144+00	Polybilt
31	2150+00	Polybilt
32	2154+00	Polybilt
33	2160+00	Polybilt
34	2164+00	Polybilt
35	2170+00	Polybilt
36	2176+00	Exxon
37	2180+00	Exxon
38	2184+00	Exxon
39	2188+00	Exxon
40	2192+00	Exxon
41	2196+00	Exxon
42	2200+00	Exxon
43	2208+00	Kraton
44	2214+00	Kraton
45	2220+00	Kraton
46	2226+00	Kraton
47	2232+00	Kraton
48	2238+00	Kraton
49	2244+00	Kraton
50	2250+00	Kraton
51	2254+00	Kraton
52	2260+00	Kraton


Post-construction & 1st Annual Profiles
MSU St. 27, 2130+00, Polybilt, EBD Lane

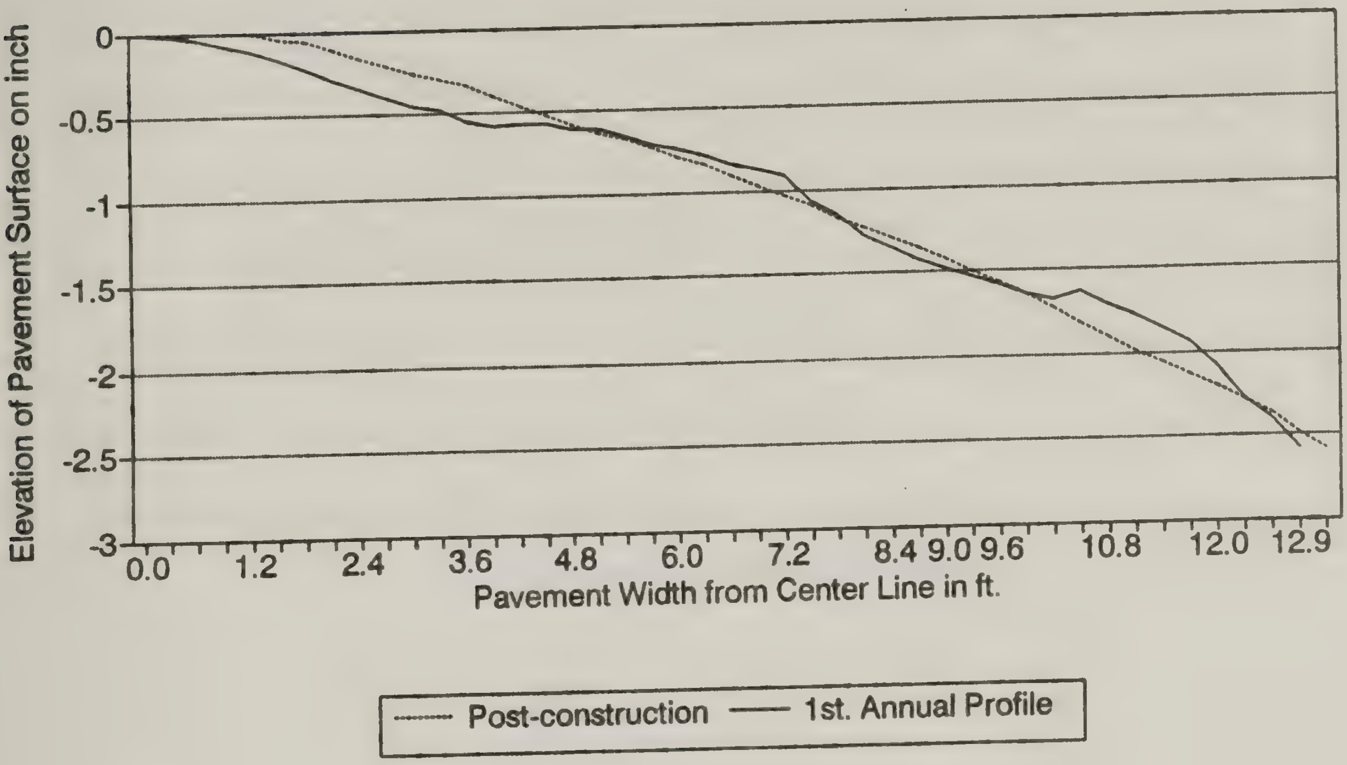

Post-construction & 1st Annual Profiles
MSU St. 28, 2134+00, Polybilt, EBD Lane



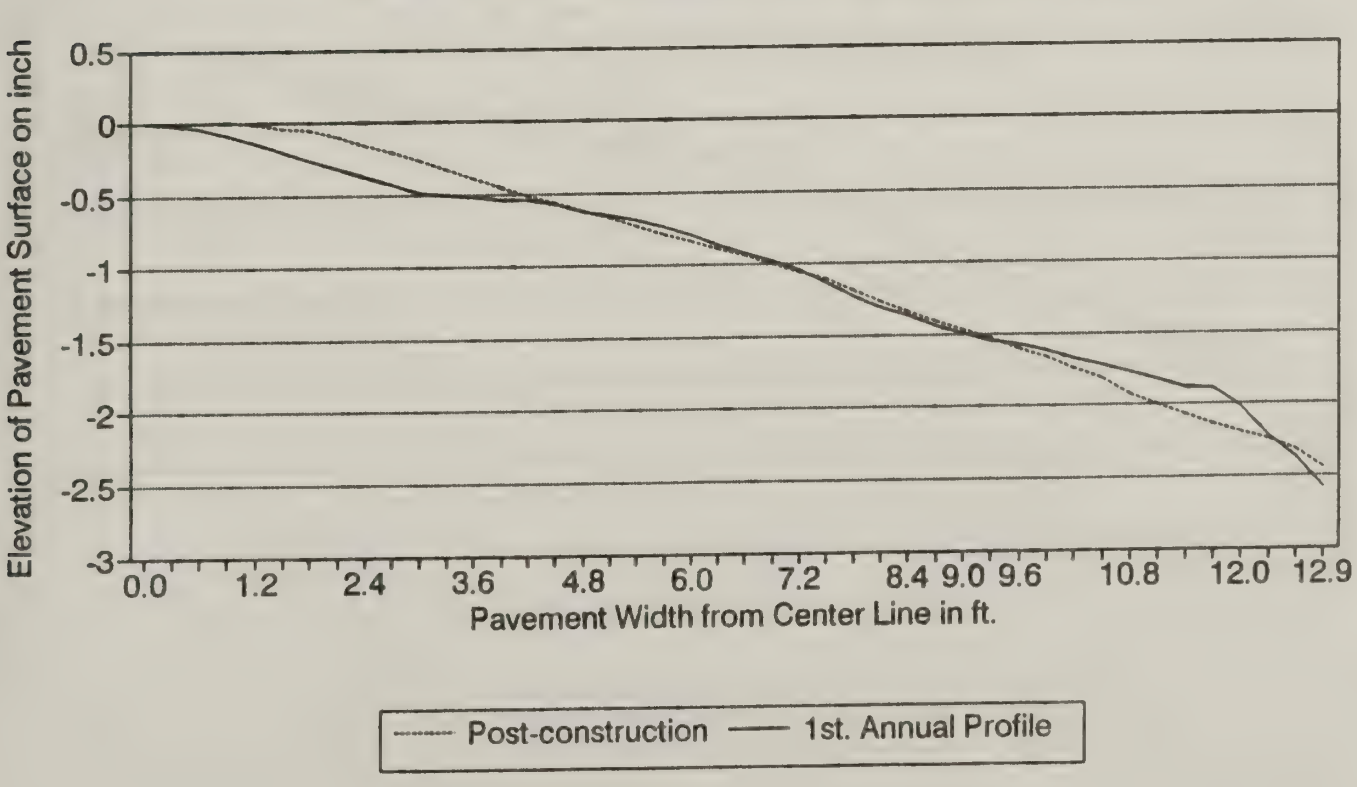
Post-construction & 1st Annual Profiles
MSU St. 29, 2138+00, Polybilt, EBD Lane



Post-construction & 1st Annual Profiles
MSU St. 30, 2144+00, Polybilt, EBD Lane

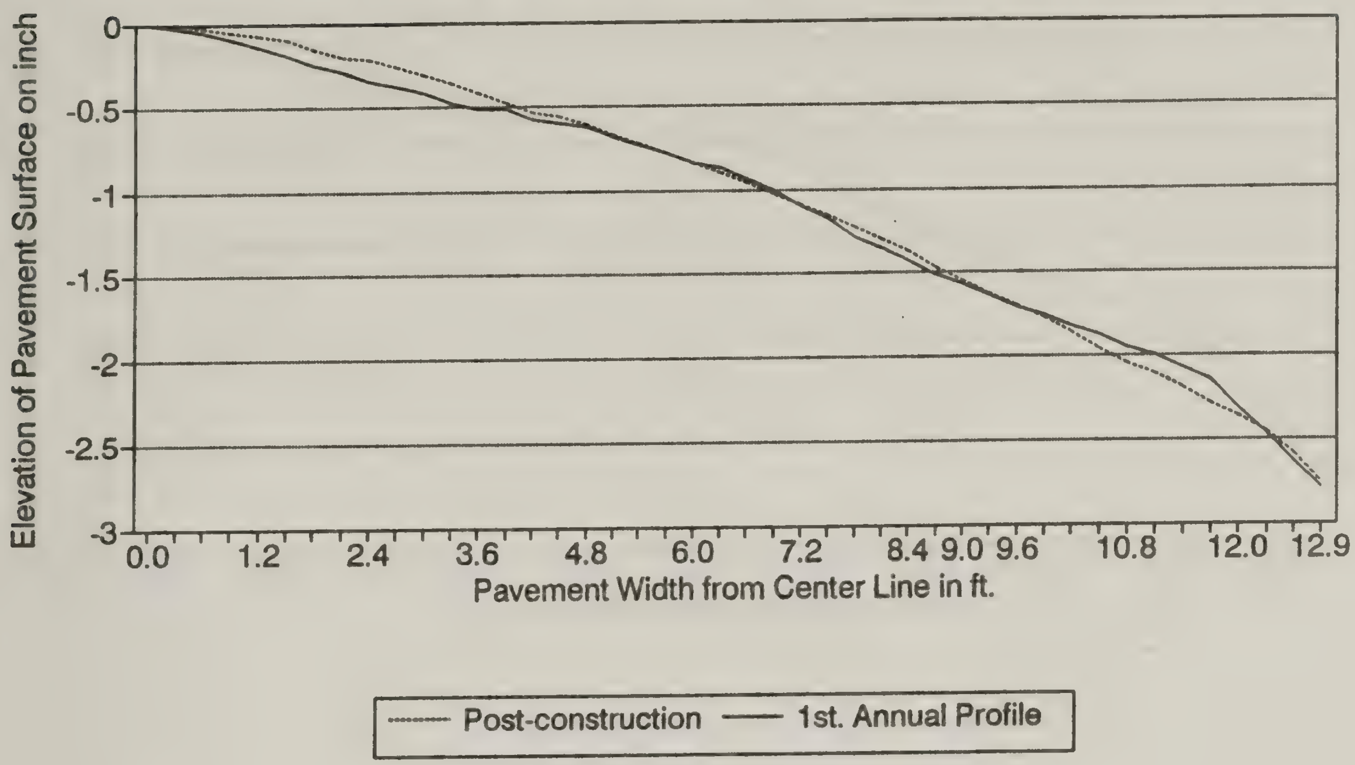


Post-construction & 1st Annual Profiles
MSU St. 31, 2150+00, Polybilt, EBD Lane

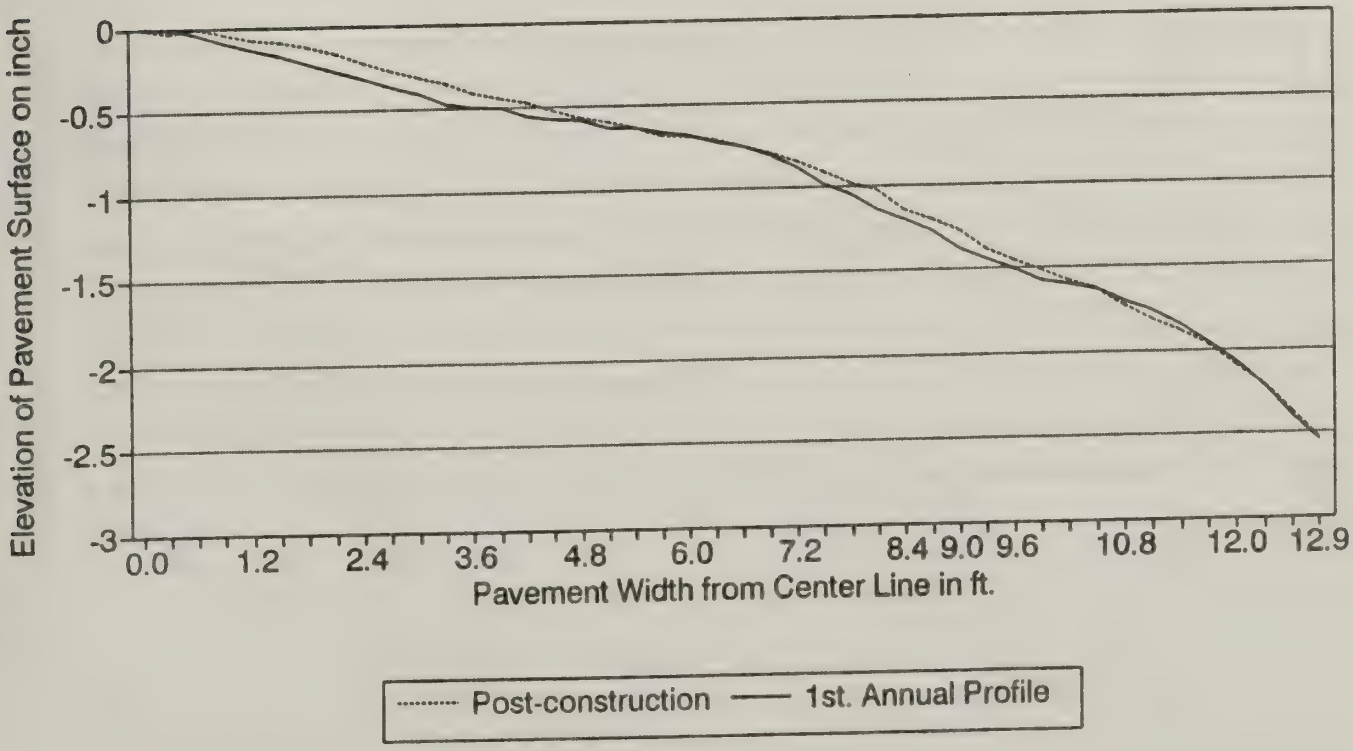


Post-construction & 1st Annual Profiles
MSU St. 32, 2154+00, Polybilt, EBD Lane

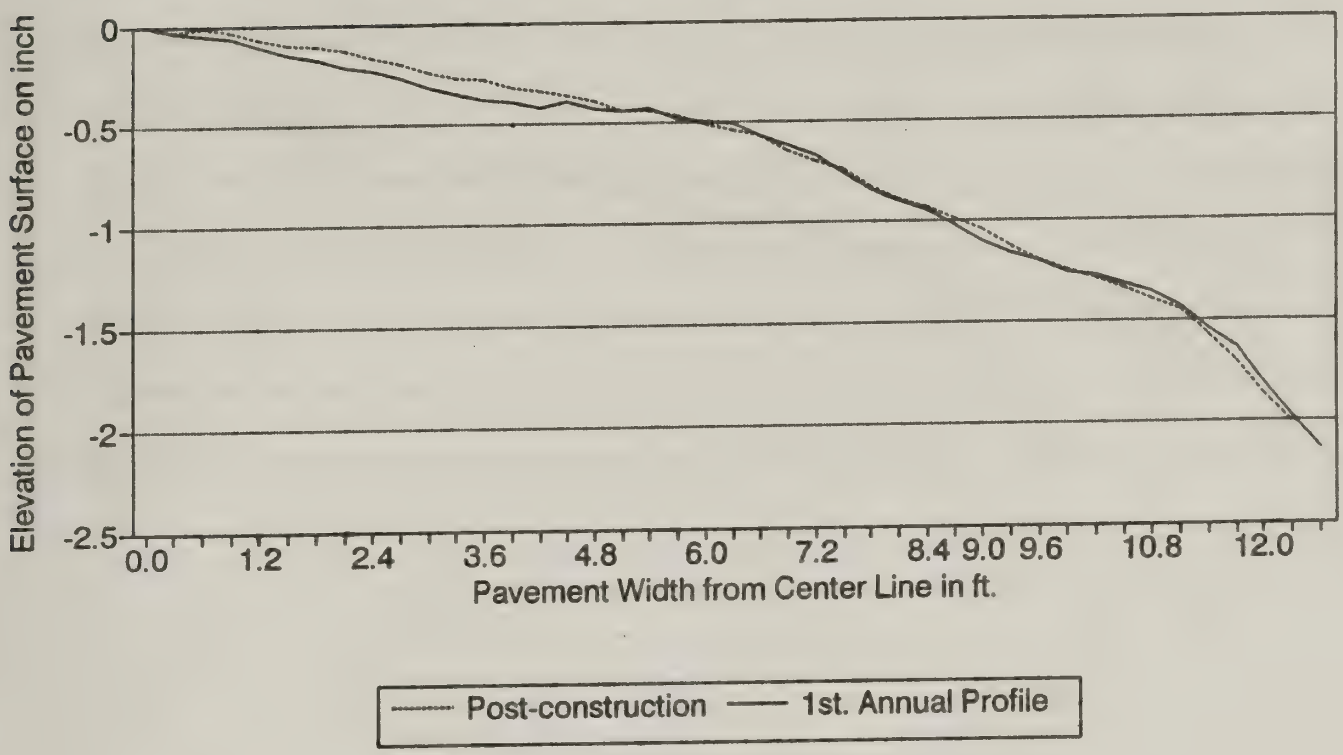
Post-construction & 1st Annual Profiles
MSU St. 33, 2160+00, Polybilt, EBD Lane



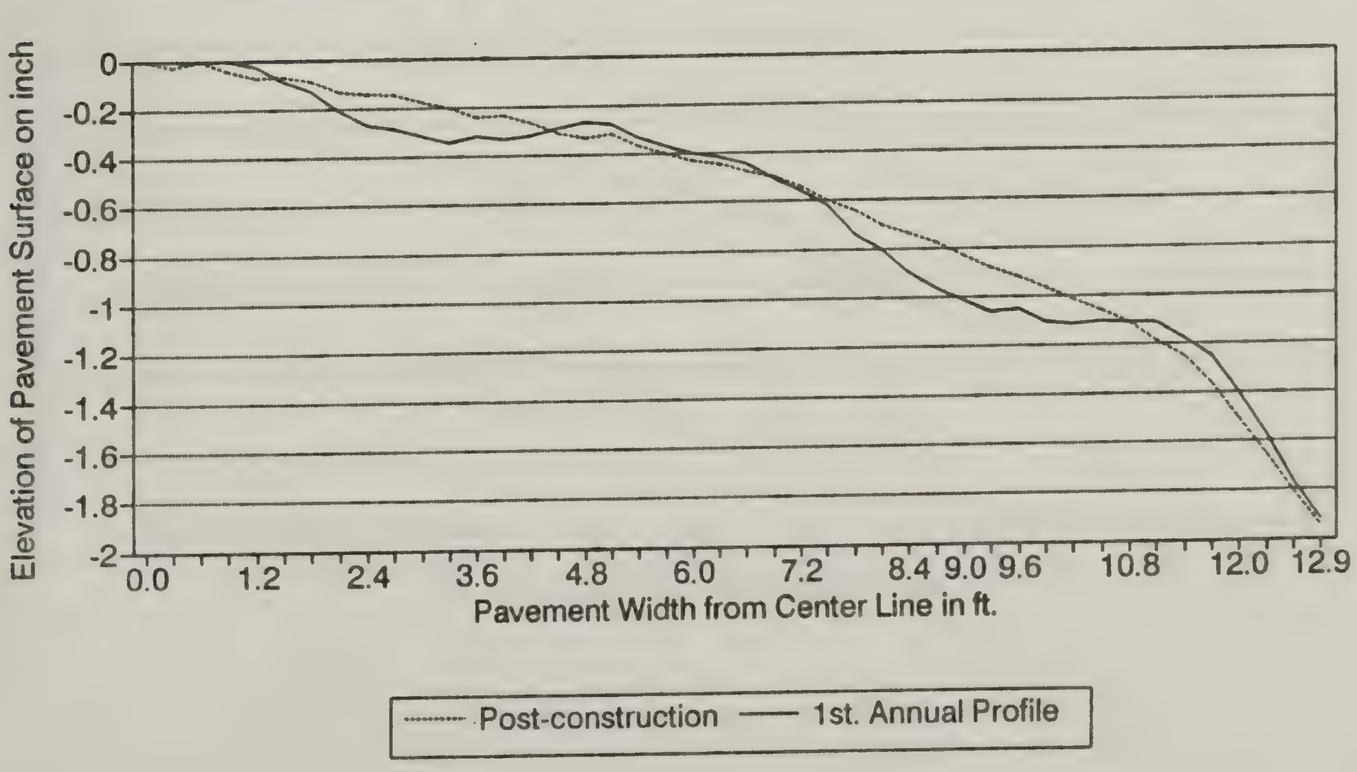
Post-construction & 1st Annual Profiles
MSU St. 34, 2164+00, Polybilt, EBD Lane



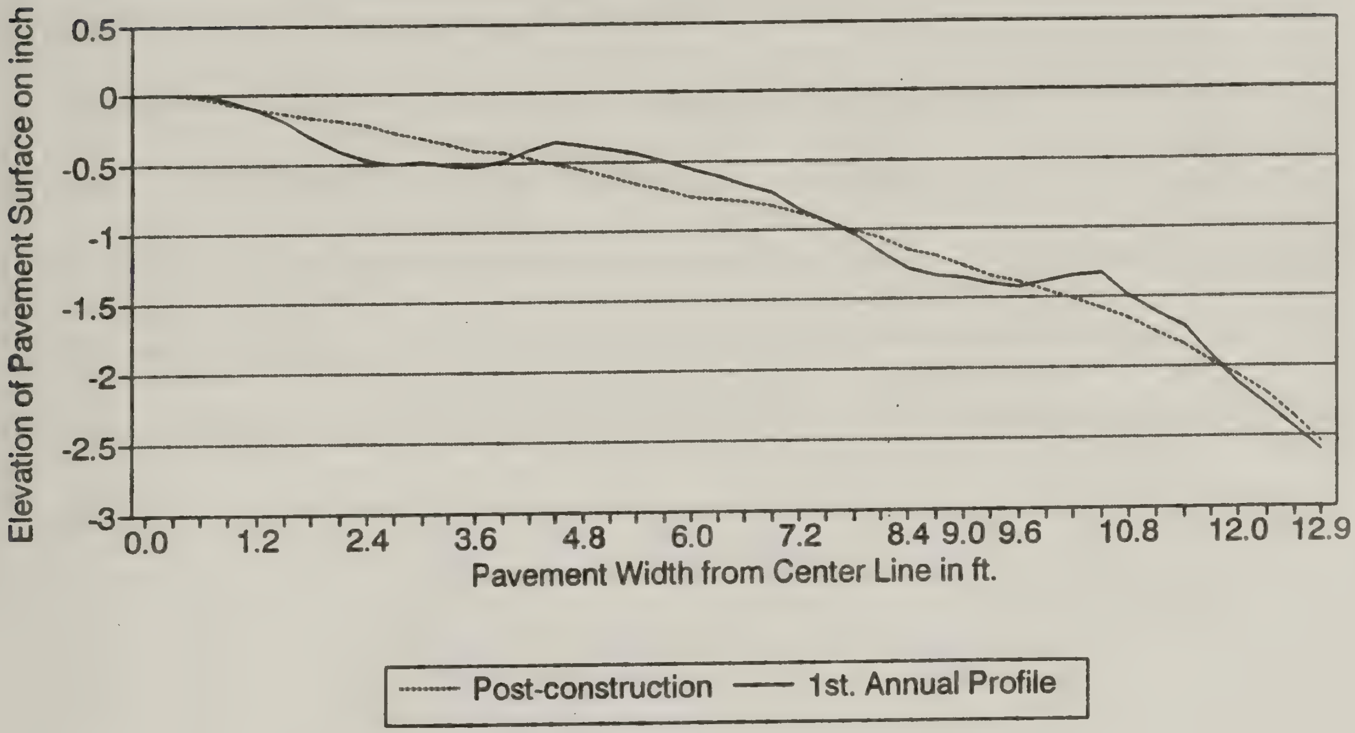
Post-construction & 1st Annual Profiles
MSU St. 35, 2170+00, Polybilt, EBD Lane



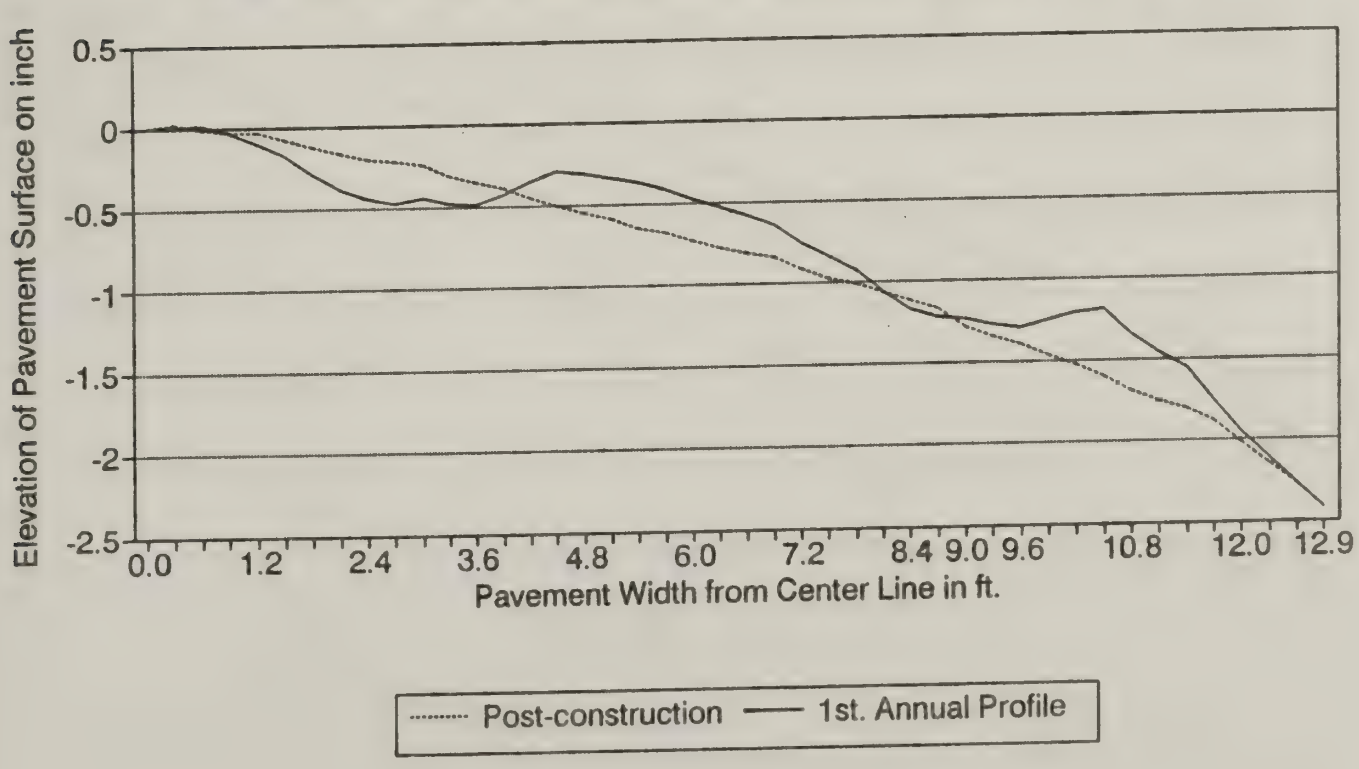
Post-construction & 1st Annual Profiles
MSU St. 36, 2176+00, Control, EBD Lane



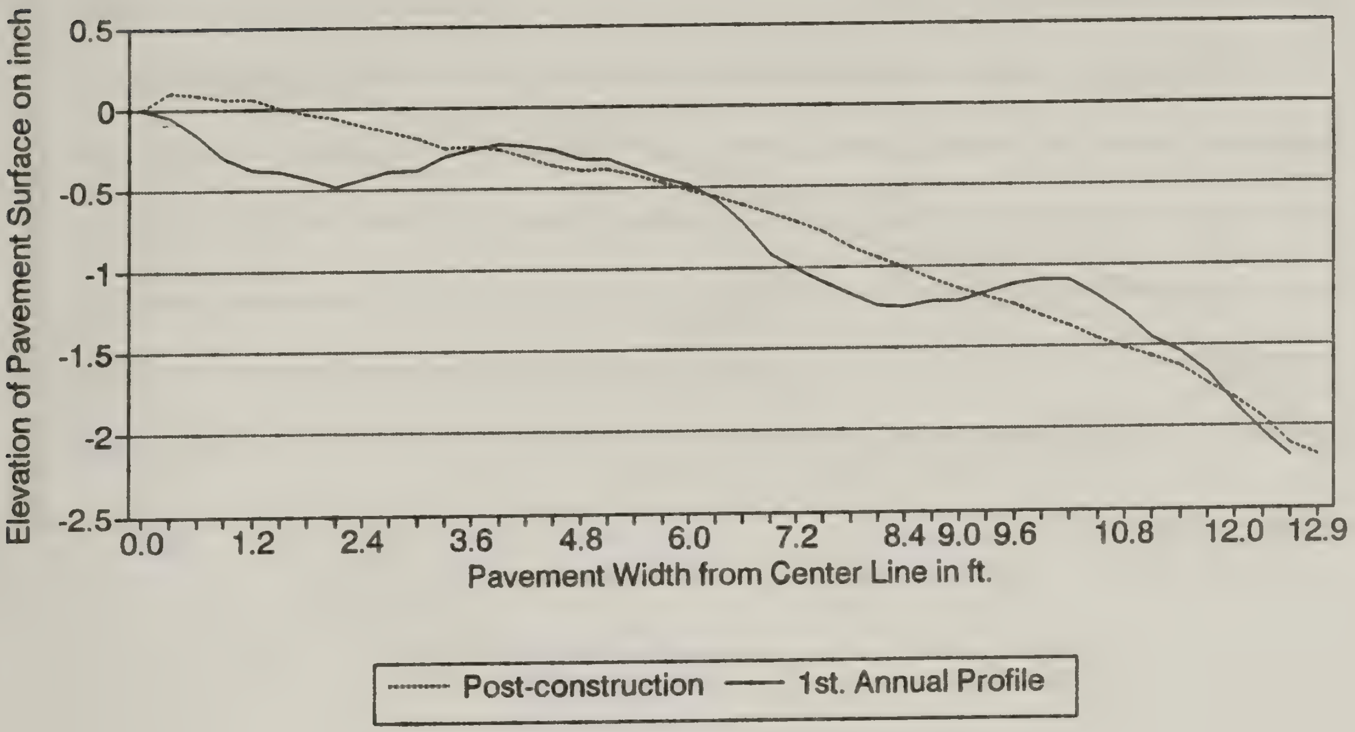
Post-construction & 1st Annual Profiles
MSU St. 37, 2180+00, Control, EBD Lane



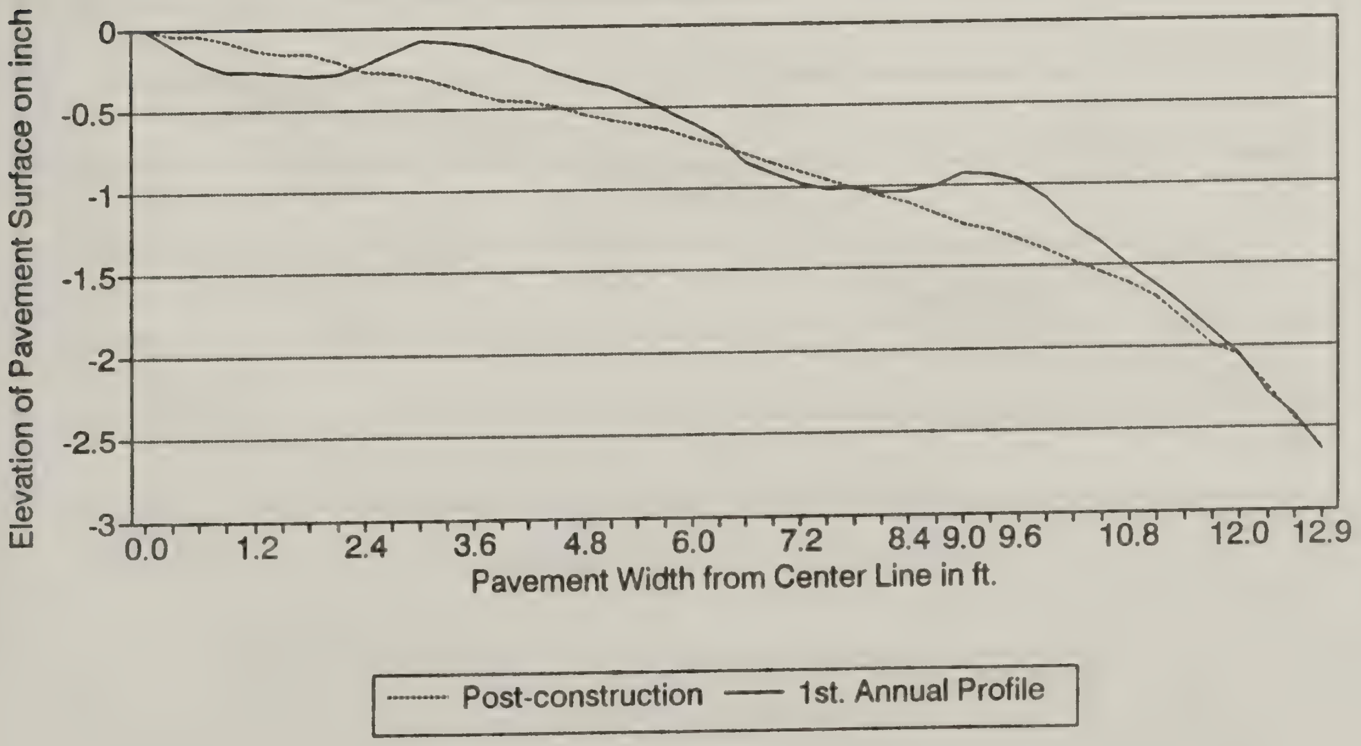
Post-construction & 1st Annual Profiles
MSU St. 38, 2184+00, Control, EBD Lane

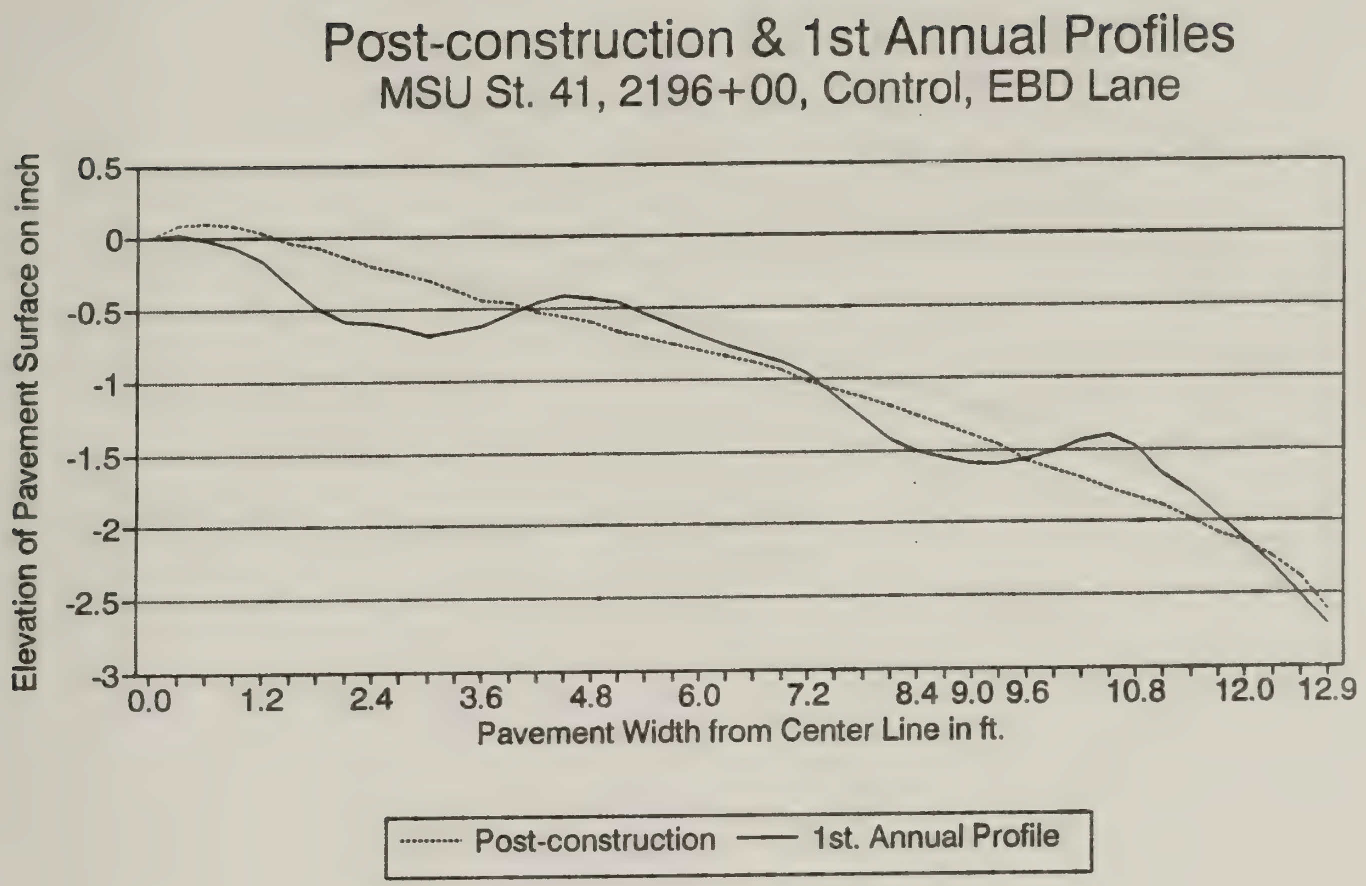


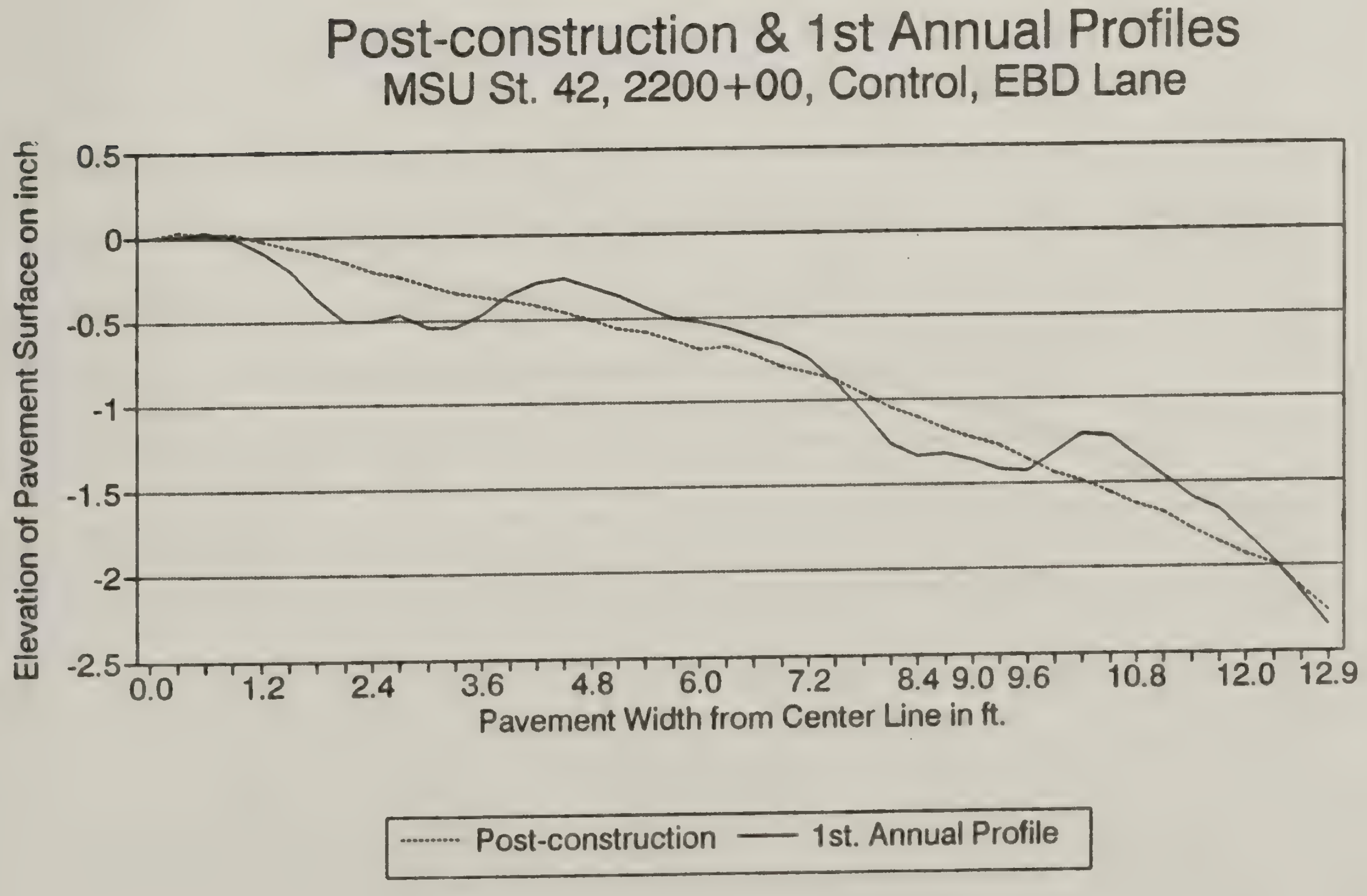
Post-construction & 1st Annual Profiles
MSU St. 39, 2188+00, Control, EBD Lane



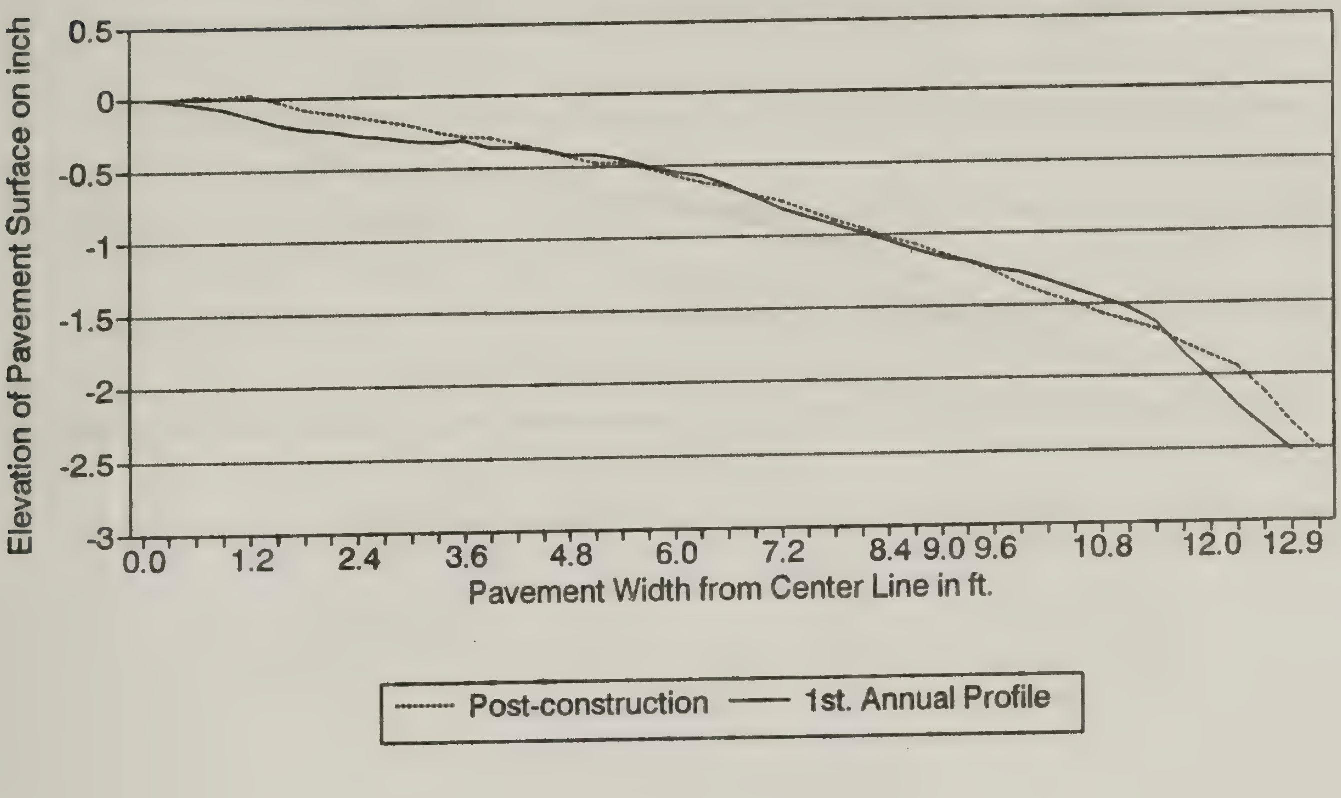
Post-construction & 1st Annual Profiles
MSU St. 40, 2192+00, Control, EBD Lane



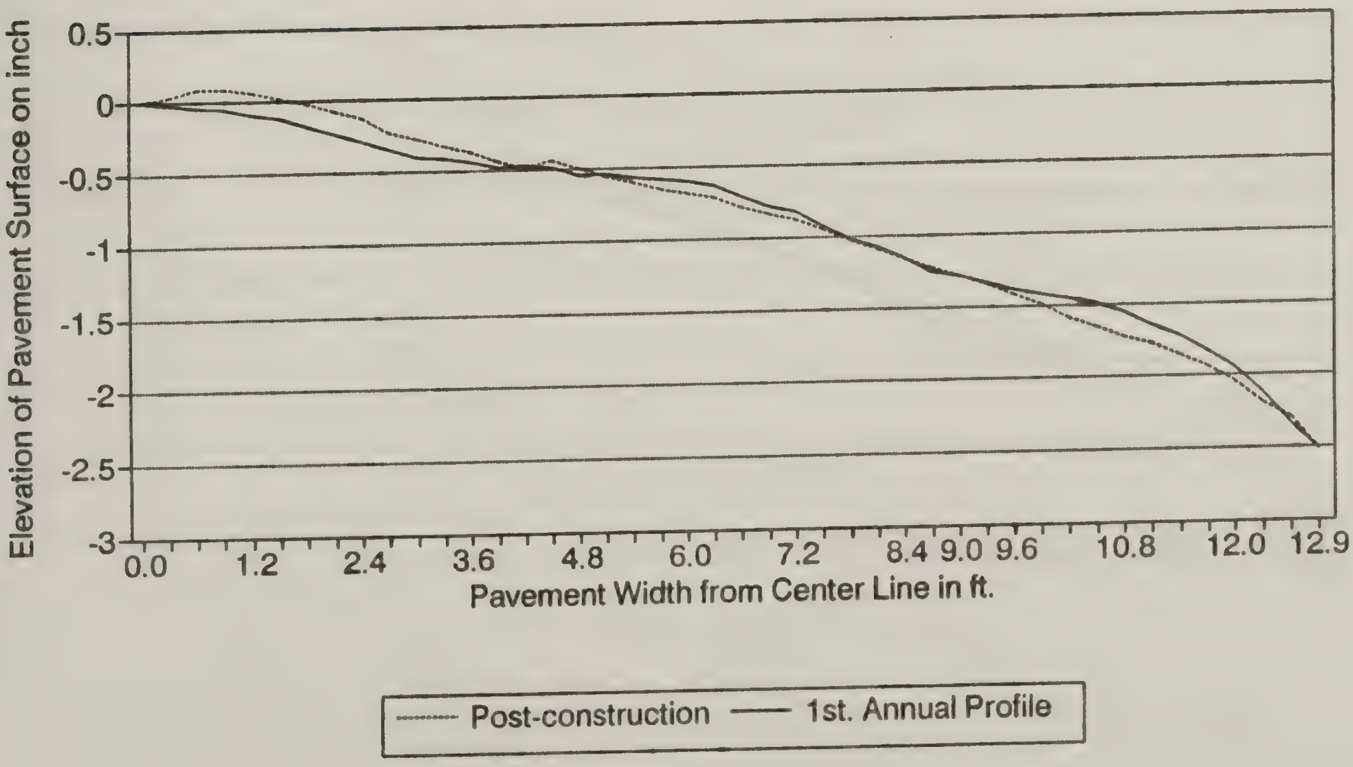

Post-construction & 1st Annual Profiles
MSU St. 41, 2196+00, Control, EBD Lane
Elevation of Pavement Surface on inch
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
0.0
1.2
2.4
3.6
4.8
6.0
7.2
8.4 9.0 9.6
10.8
12.0
12.9
Pavement Width from Center Line in ft.
Post-construction
1st. Annual Profile

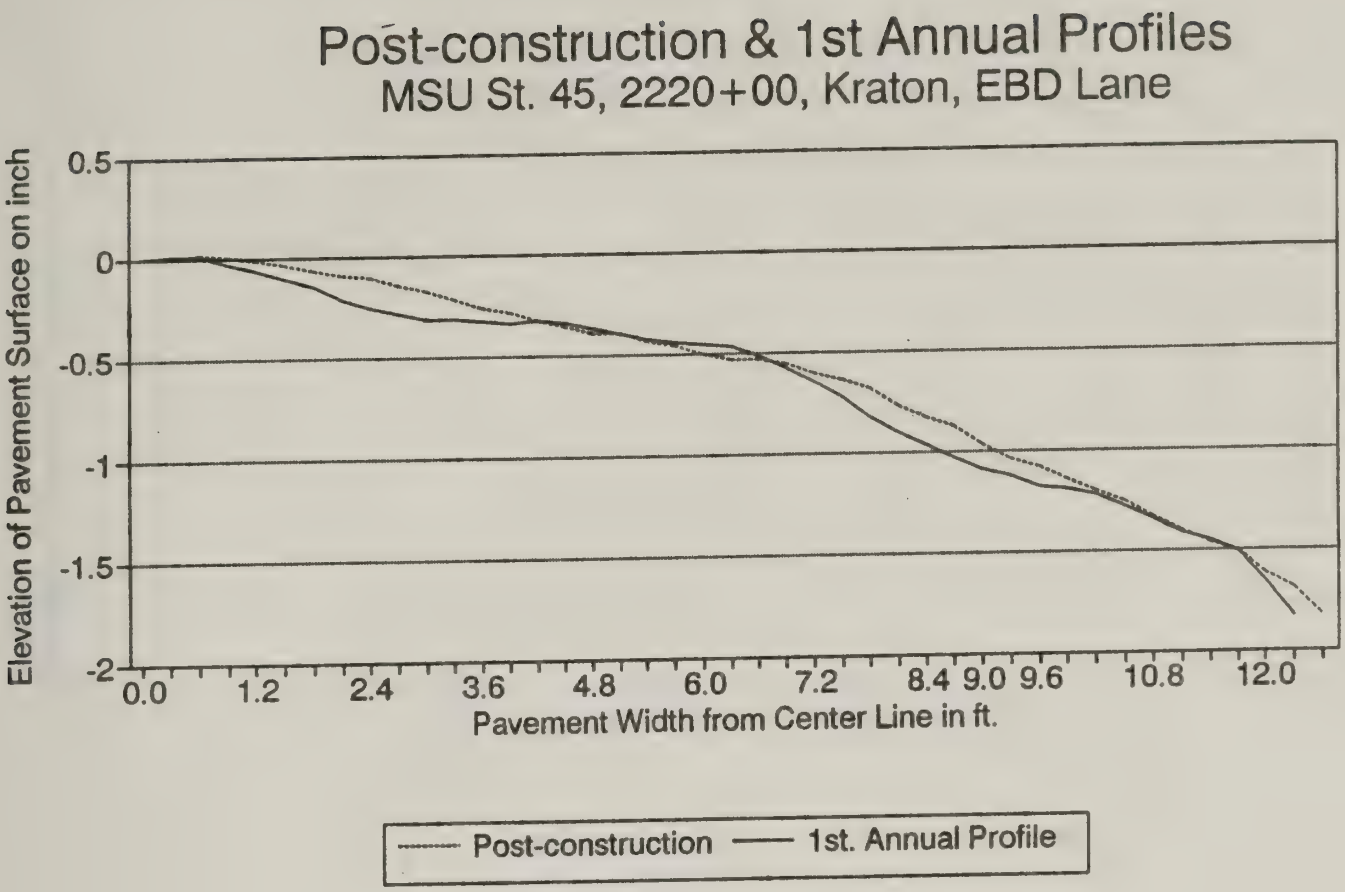

Post-construction & 1st Annual Profiles
MSU St. 42, 2200+00, Control, EBD Lane
Elevation of Pavement Surface on inch
0.5
0
-0.5
-1
-1.5
-2
-2.5
0.0
1.2
2.4
3.6
4.8
6.0
7.2
8.4 9.0 9.6
10.8
12.0
12.9
Pavement Width from Center Line in ft.
Post-construction
1st. Annual Profile

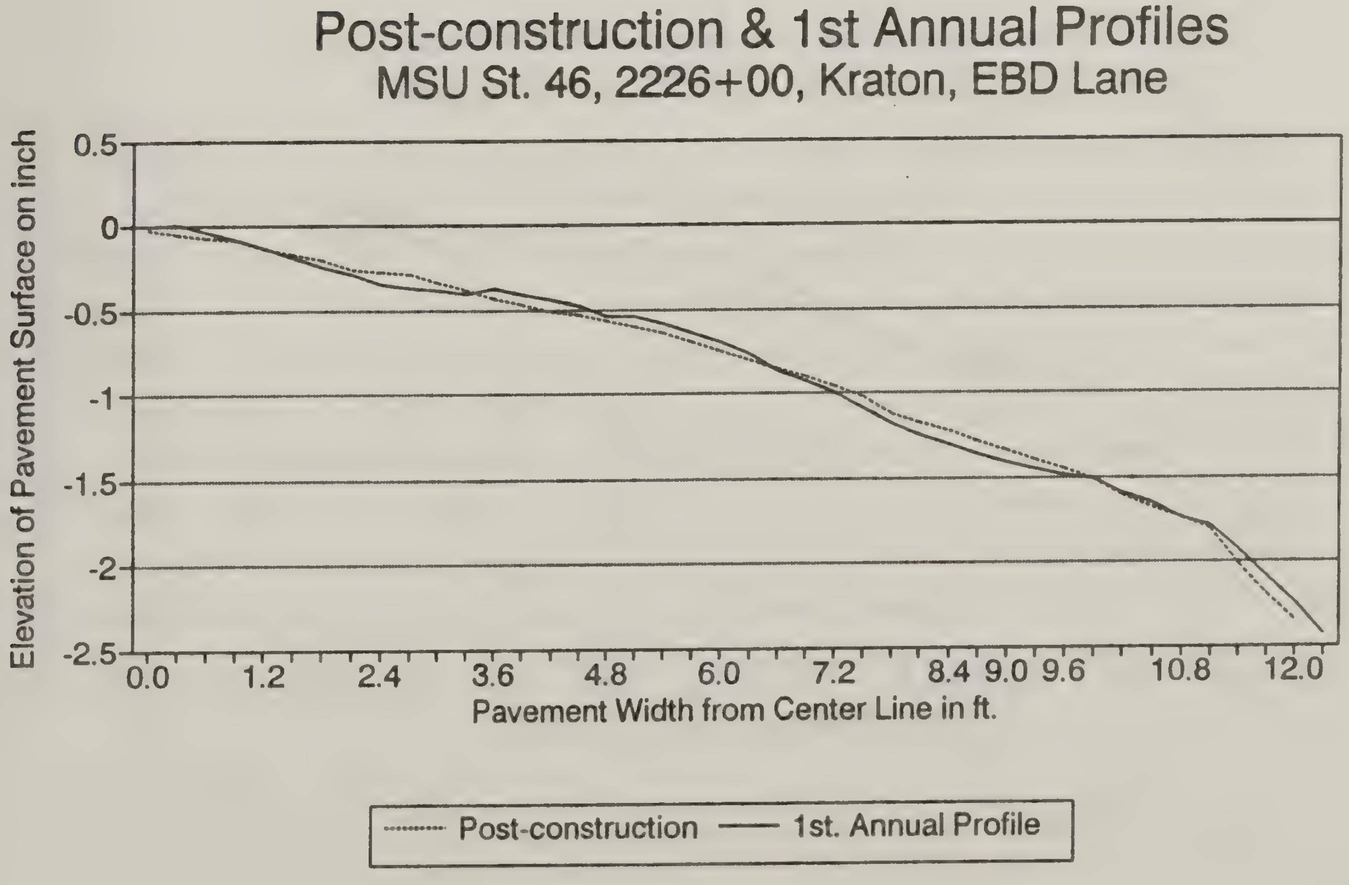
Post-construction & 1st Annual Profiles
MSU St. 43, 2208+00, Kraton, EBD Lane

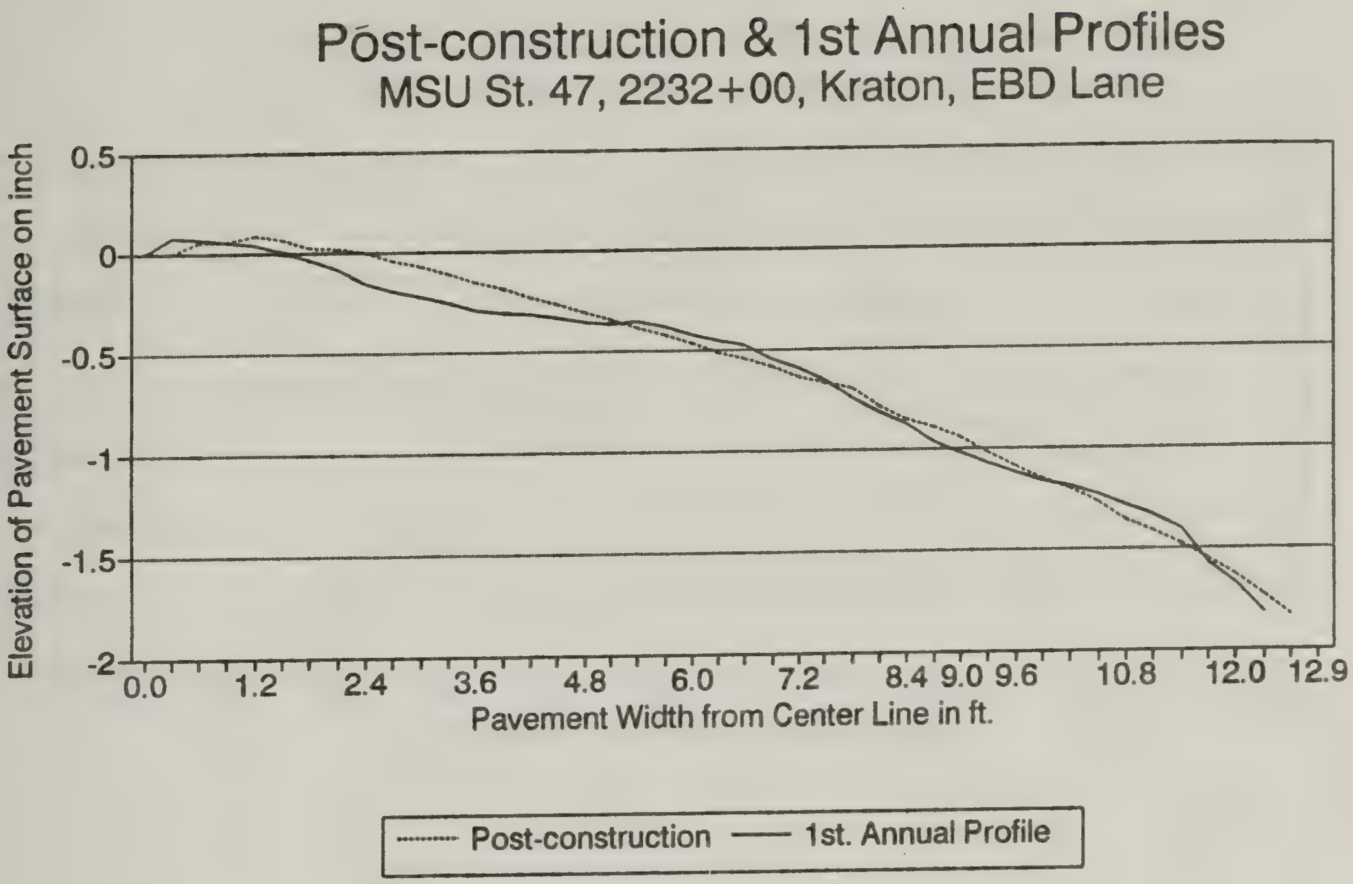


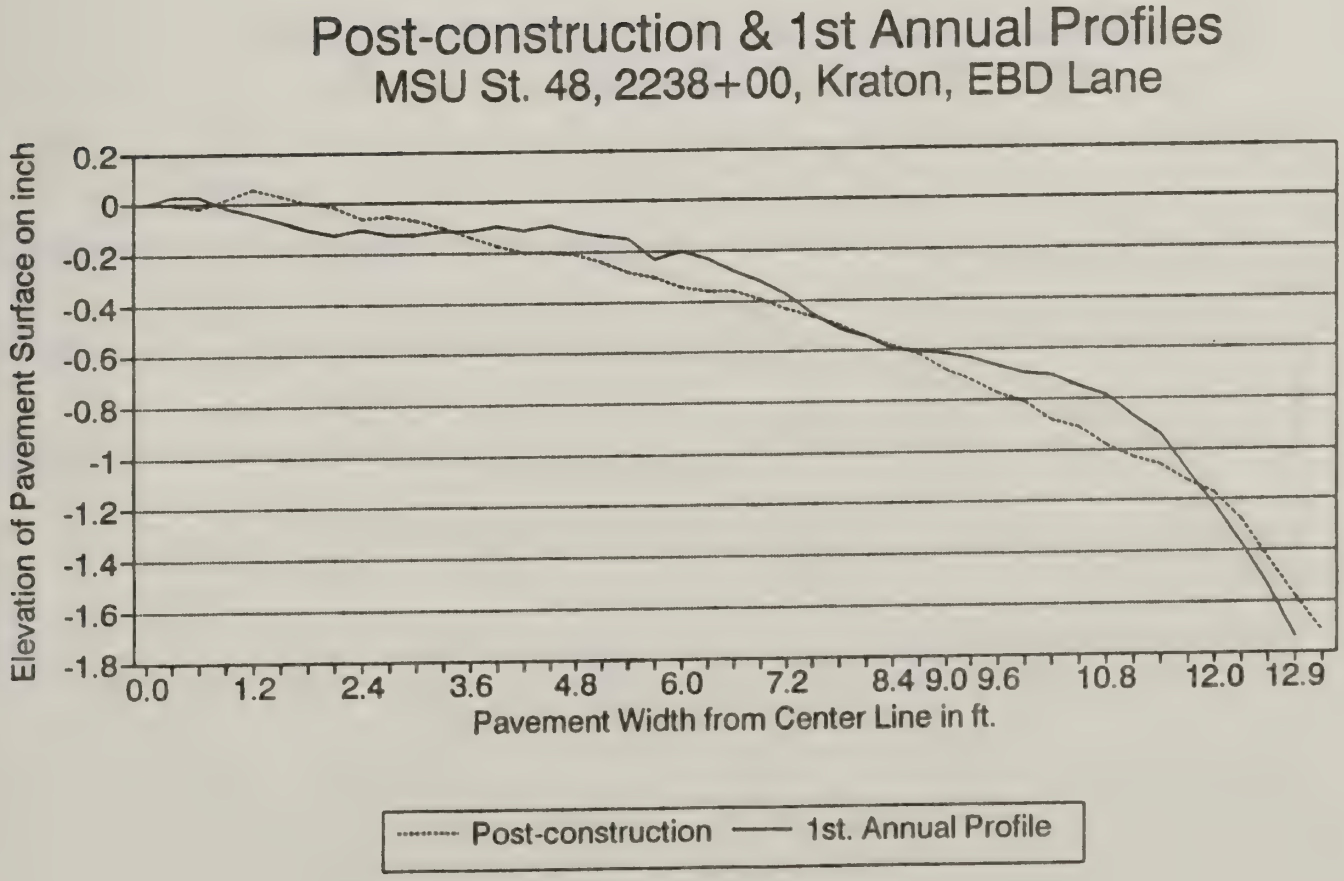
Post-construction & 1st Annual Profiles
MSU St. 44, 2214+00, Kraton, EBD Lane

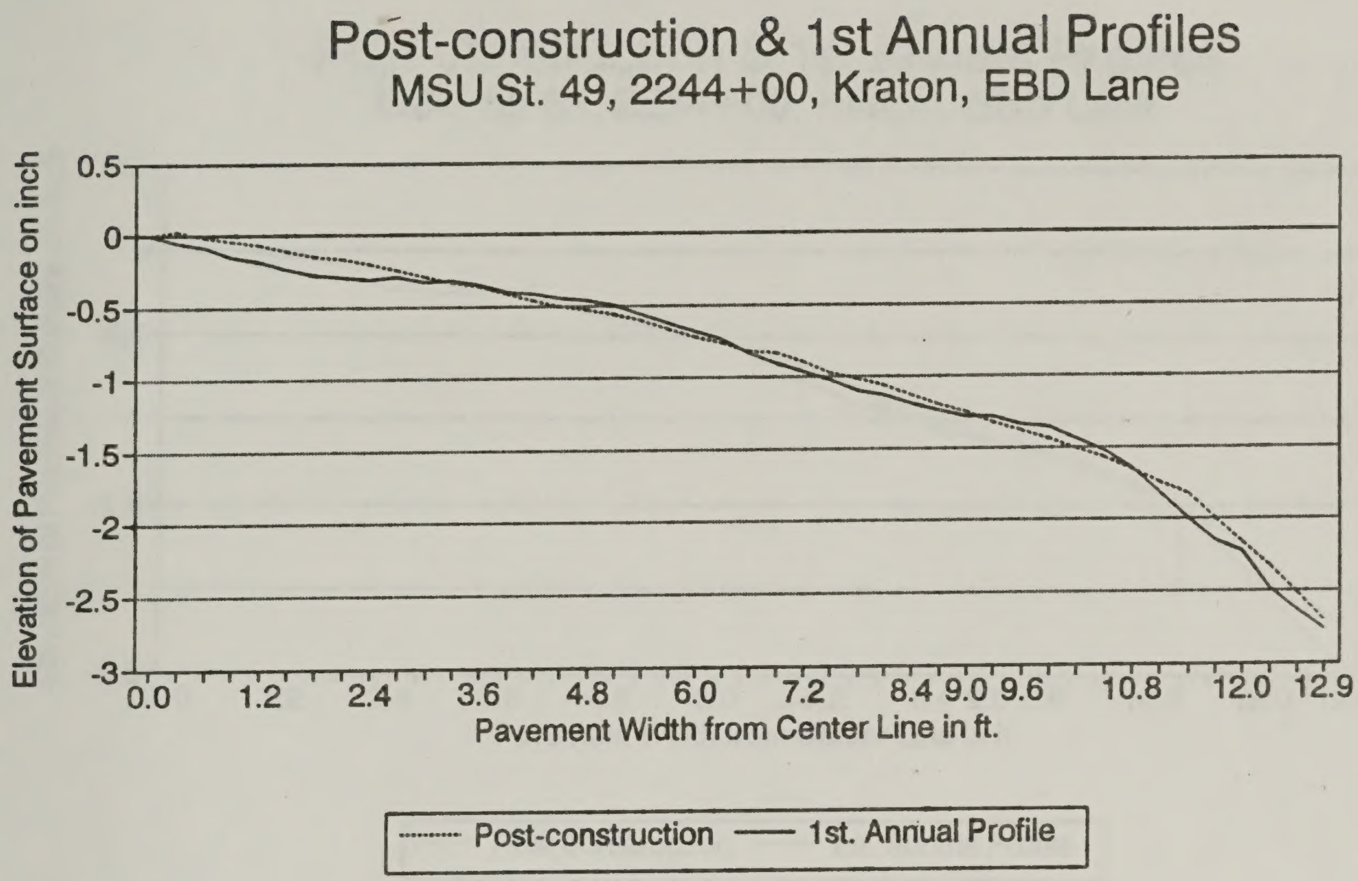



Post-construction & 1st Annual Profiles
MSU St. 45, 2220+00, Kraton, EBD Lane
Elevation of Pavement Surface on inch
0.5
0
-0.5
-1
-1.5
-2
0.0
1.2
2.4
3.6
4.8
6.0
7.2
8.4
9.0
9.6
10.8
12.0
Pavement Width from Center Line in ft.
Post-construction
1st. Annual Profile

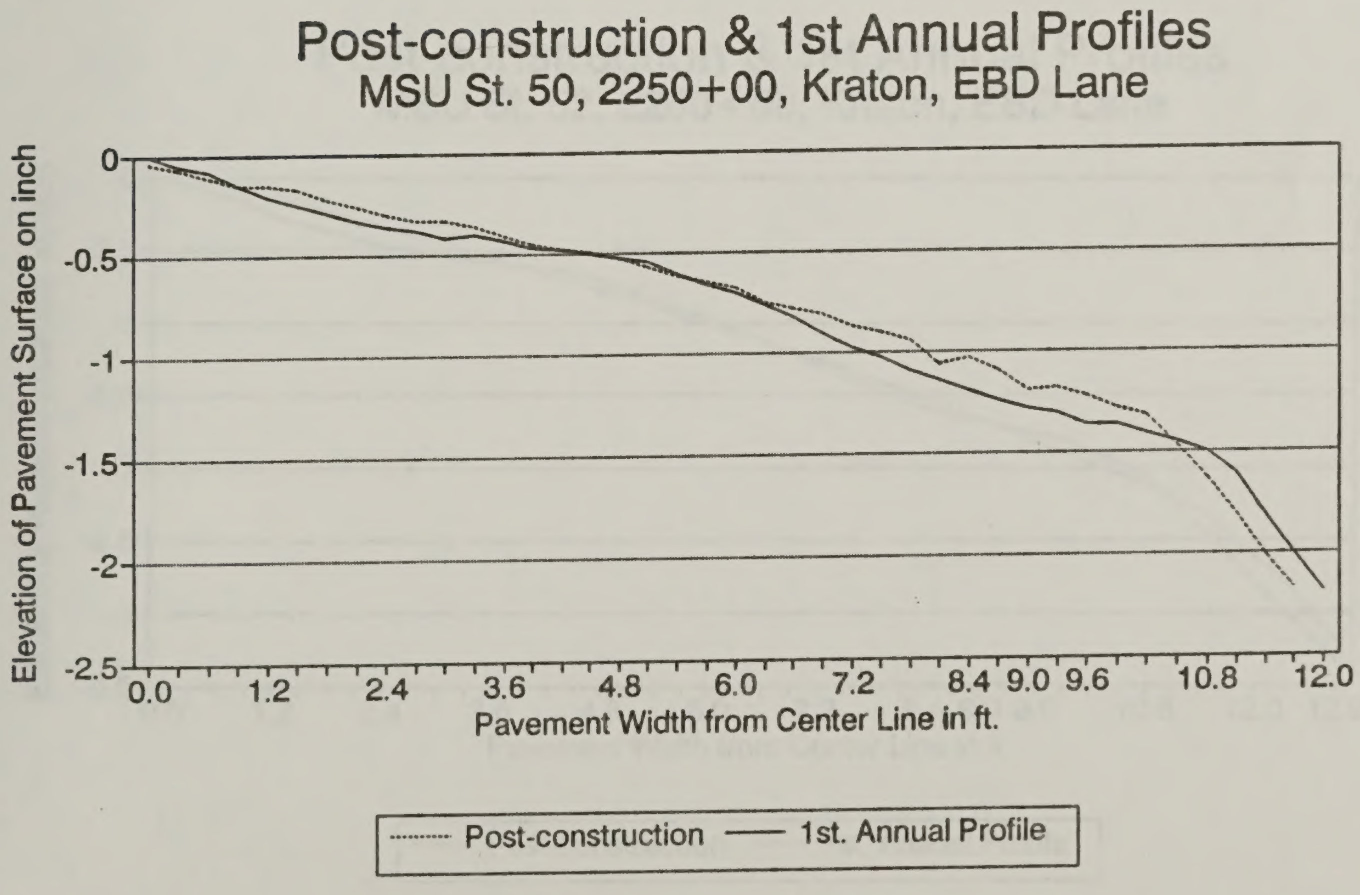

Post-construction & 1st Annual Profiles
MSU St. 46, 2226+00, Kraton, EBD Lane
Elevation of Pavement Surface on inch
0.5
0
-0.5
-1
-1.5
-2
-2.5
0.0
1.2
2.4
3.6
4.8
6.0
7.2
8.4
9.0
9.6
10.8
12.0
Pavement Width from Center Line in ft.
Post-construction
1st. Annual Profile


Post-construction & 1st Annual Profiles
MSU St. 47, 2232+00, Kraton, EBD Lane
Elevation of Pavement Surface on inch
0.5
0
-0.5
-1
-1.5
-2
0.0
1.2
2.4
3.6
4.8
6.0
7.2
8.4
9.0
9.6
10.8
12.0
12.9
Pavement Width from Center Line in ft.
Post-construction
1st. Annual Profile

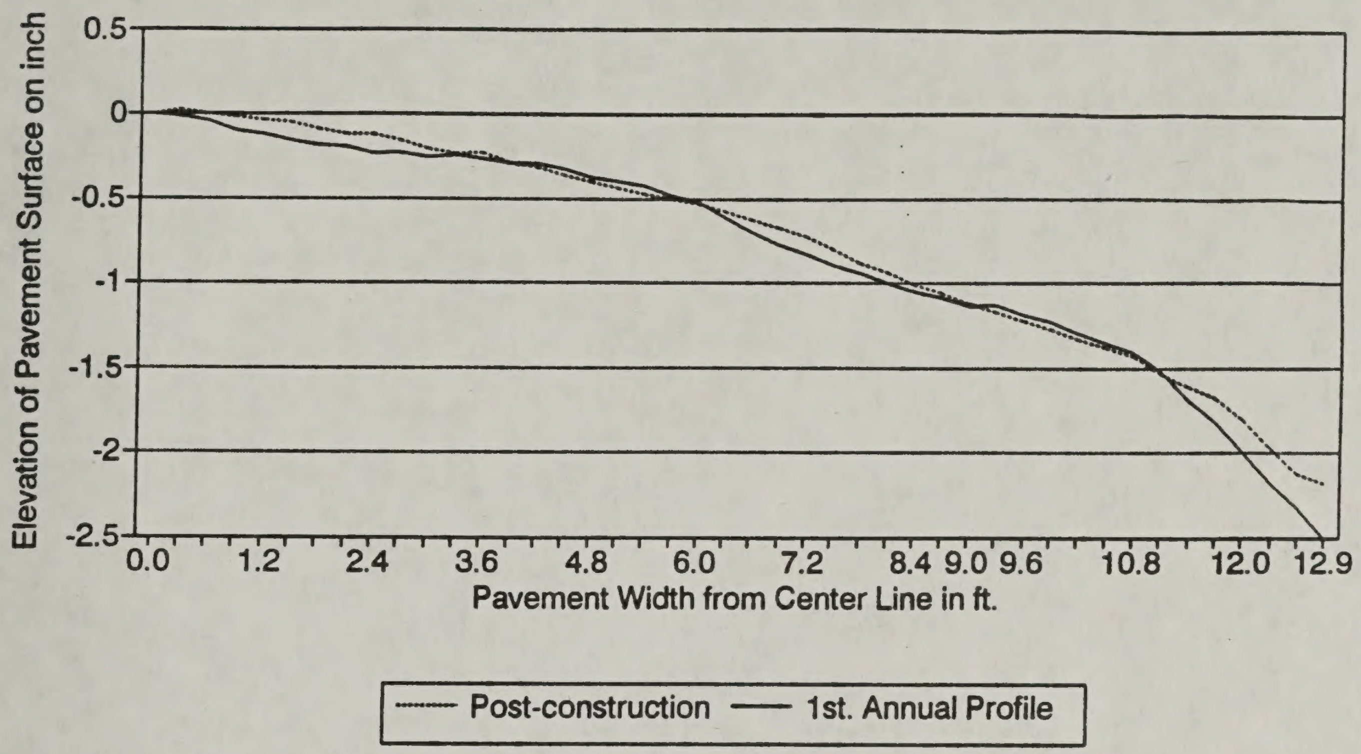

Post-construction & 1st Annual Profiles
MSU St. 48, 2238+00, Kraton, EBD Lane
Elevation of Pavement Surface on inch
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
-1.2
-1.4
-1.6
-1.8
0.0
1.2
2.4
3.6
4.8
6.0
7.2
8.4
9.0
9.6
10.8
12.0
12.9
Pavement Width from Center Line in ft.
Post-construction
1st. Annual Profile



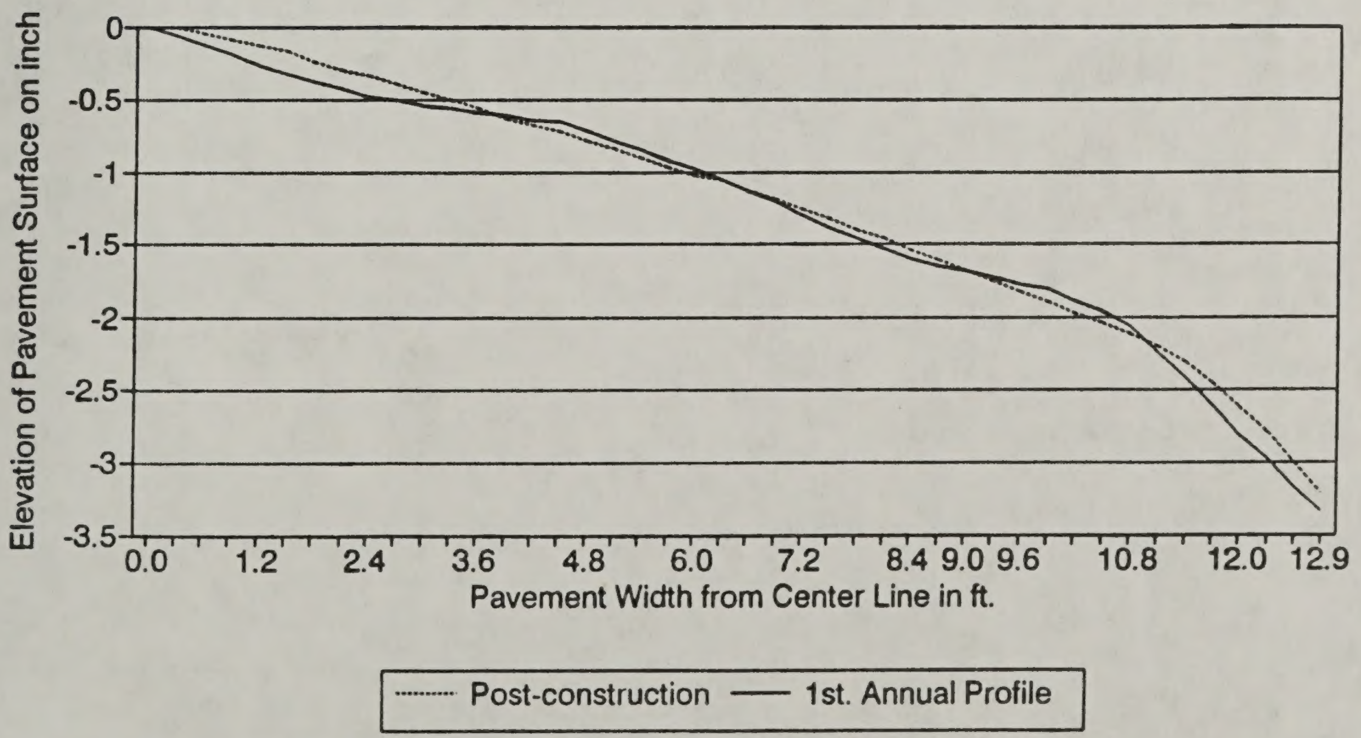
Post-construction & 1st Annual Profiles
MSU St. 49, 2244+00, Kraton, EBD Lane



Post-construction & 1st Annual Profiles
MSU St. 50, 2250+00, Kraton, EBD Lane



Post-construction & 1st Annual Profiles
MSU St. 51, 2254+00, Kraton, EBD Lane



Post-construction & 1st Annual Profiles
MSU St. 52, 2260+00, Kraton, EBD Lane

MDT Library
3 9526 01019142 6